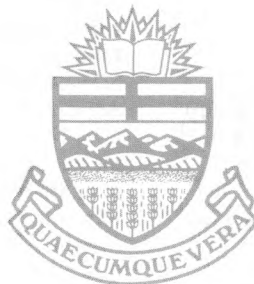


FOLIO NEW TRAIL



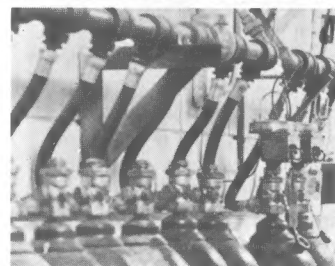
How much is The University of Alberta worth to Edmonton and the surrounding region? In certain terms, perhaps the value is inestimable; financially, according to a report of the University's non-profit Management Advisory Institute, about \$230 million. (Page 7)

In this issue another of the University's smaller Faculties is featured. The Faculty of Library Science, established in 1968, offers post-baccalaureate degrees to about thirty-five people each year. (Overleaf)

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: 419 add;
: 420 id = 2537;
: 421 a = Peel, Bruce Braden;
: 422 t = A bibliography of the Prairie Provinces to 1953.;
: 423 pl = Toronto;;
: 424 p = University of Toronto Press;;
: 425 d = 1956;
    
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Our University is renowned for its athletes. A summary of the Golden Bears and Pandas 1980-81 season tells all. (Page 9)
Those poor Ottawa Gee Gees!
On another front, the continuing success of the staff in the Department of Drama is detailed. (Page 13)



Also in this issue are our regular columns "Research Reporter" (page 12) and "Alumni Notes" (page 17). In addition, find out what the Department of Chemistry does to maintain a high level of safety and safety consciousness. (Page 7)

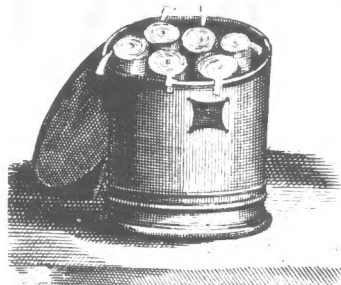
Faculty Profile: Library Science

Historical Background

The School of Library Science was established in 1968, located in an area now fully occupied by the H.T. Coutts (Education) Library. The first class graduated in 1969, a class that still considers itself very special, with a Bachelor of Library Science, a one-year post-baccalaureate degree.

The decision to provide library education in the prairies had not been a hasty one. Library administrators at least, had foreseen the demand for professional librarians and were advocating a graduate program from the end of World War II. With the tremendous development of educational programs during this period and a renewed emphasis on adult education, libraries were established in every sphere—schools, colleges, universities, cities, small towns, and rural areas. The demand for librarians in industry and government, especially in the more industrially developed and developing areas, competed with the demand in educational institutions and in the municipalities. By the 'fifties, the competition for the thin trickle of Canadian graduates was fierce, and librarians from any anglophone area were welcomed. Prairie students were recruited and sent elsewhere for professional education, only to be lured by the libraries and "flesh-pots" of the East. In 1961, British Columbia opened a School of Librarianship, the first in the western provinces. Its graduates frequently refused to leave the coast for positions in the prairies. Gradually the prairie librarians managed to coordinate their efforts: the availability of professional personnel could only be improved by the establishment of a school in the prairie provinces.

The question was where? Winnipeg, Saskatoon, and Edmonton were all interested contenders. Marjorie Sherlock, former Chief Librarian at The University of Alberta had planned the top floor of the Rutherford



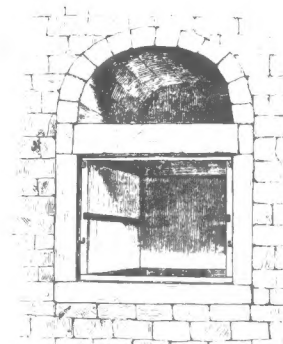
A Roman "capsa" with tagged scrolls.

Library (now Rutherford South) to accommodate a library school, part of the space which the Faculty now occupies. By 1964, the needs were such that a committee of prairie university librarians, chaired by Morton Coburn, Chief of Edmonton Public Library and including Bruce Peel, Librarian to The University of Alberta, on behalf of the library associations of Alberta, Manitoba and Saskatchewan, presented a brief to the Presidents of the western provincial universities, asking them to approve the establishment of a library school to provide for prairie requirements. The brief indicated the extent of, and anticipated need for professional librarians in the area, and evaluated the relative merits of the cities of Edmonton, Saskatoon and Winnipeg as "library bases" for the projected school.

Alberta took up the challenge and a school was approved by the University's Board of Governors in 1965 and assigned by the Universities Coordinating Council to the Edmonton campus in 1966. Thereupon a Search Committee, chaired by President Johns, set about finding a Director. Potential directors and faculty were no easier to find than librarians at any other level, and it was only after considerable effort that the Committee was able to secure the services of Sarah Rebecca Reed,

then Library Education Specialist in the US Office of Education.

Sarah Reed was appointed Director in 1967. She immediately began recruiting potential faculty even before she left her Washington office. This was typical of her energy and dedication which, combined with her experience, close association with Canadian librarians, rapid assimilation into, and appreciation of the Canadian library situation, enabled her to develop a firm foundation in facilities, faculty and curriculum. In 1970, the School applied for accreditation by the American Library Association which acts on behalf of the Canadian Library Association. Accreditation granted in 1970 provided recognition that the quality of the graduate program met the educational standards established within Canada and the United States, thus rendering the graduates competitive within both countries. In 1971, after four dynamic years of leadership, Sarah Reed returned to the US. She has been succeeded (1971-76) by M.E.P. Henderson, from The University of Alberta; (1976-79) by C.H. Davis, from the University of Michigan, Ann Arbor; and, since 1980, by W.J.



A medieval monastery book cupboard.

Kurmey, from the University of Toronto.

The BLS was a one-year post-baccalaureate degree involving, of necessity, a structured sequence of required courses with a limited number of options allowing individual specialization. The increasing scope and sophistication of library science necessitated a more extensive basic knowledge represented by course content which should be mastered by all students.

The first MLS (Master of Library Science) degree program was developed in conjunction with



Stacks in Rutherford Library.

library science and media specialists in the Faculty of Education, primarily for school librarians, and was approved in 1970. A year of additional full- or part-time study for experienced librarians with the BLS degree was required. The year 1970-71 saw an increase in courses available for the MLS to accommodate the demand by returning BLS candidates from all sectors of the profession for advanced specialization. The most recently developed program is an MLS (Learning Resources) degree for teachers which includes significant components of both library science and education courses. Unfortunately, the continuing financial constraints on education do little to encourage teachers to undertake graduate library studies.

The School became the Faculty of Library Science in 1976, discontinuing the BLS degree and adopting a two-year MLS degree in accordance with the pattern of education recommended in 1968 by the Canadian Association of Library Schools and endorsed by the Canadian Council of Library Schools in 1971. The change to an MLS degree was undertaken following two years of curriculum study and planning involving the faculty, students, alumni, members of the profession, professional associations, and representatives of the Faculty of Graduate Studies and Research. It marked but the first step, for the curriculum has been under review with varying degrees of intensity ever since. The move to expand library science programs to two years in Canada and the United States is based on a reassessment of educational objectives and on the need to examine new developments within the profession and adjacent fields. With the implementation of the MLS program by the Faculty, all seven library science programs in Canada are two-year MLS degree programs.

As soon as possible, shortly after the first MLS class graduated in 1978, the Faculty applied for accreditation for the new pro-

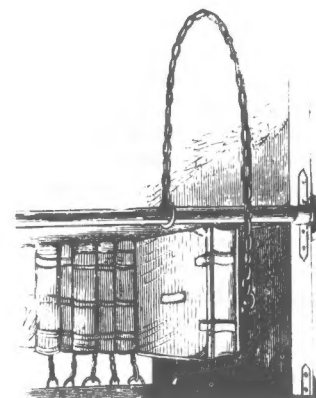
fessional degree program. This too involved considerable effort for two years, gathering and presenting data, much of which consisted of self-study and analysis. The present program of study was accredited in January, 1979. The Faculty is the smallest in the University and remains the only Faculty with an entirely graduate program.

Professional Education

Graduate professional library education suffers from the same difficulty which has concerned all professions in all ages; namely, the conflict between theory and principles, and the technical and practical skills employed in professional practice. A constant concern of the Faculty is the appropriate balance between the apparent extremes. Formal library education until 1945 emphasized technical skills now assumed, in large measure, by para-professional training available in library technician programs in community and vocational colleges. In some cases, employers still mistakenly expect this type of training from graduates of professional degree programs. The information explosion and its pervasive technology is having a galvanic effect on libraries and information services. Professional library education programs are considering principles and theory as never before.

The activities of the librarian and the nature of professional practice in library science are changing rapidly with the increasing use of automation, the proliferation of commercial information services, the emergence of information delivery to the home environment, the availability of library technicians and para-professional personnel, and the evolving interdependent relationships among the library, the information industry and society. Social issues associated with the provision of library and information services have had an explosive impact on professional

ethics and practice; the conflict between invasion of privacy and speed, convenience, accuracy in delivery of information; the information overload conflict between exponential growth of recorded information and the unchanged capability and capacity of comprehending and assimilating information; the conflict between rapid expansion in increasingly narrow, diverse, specializations and generalization to the extent that a generalist within a profession is now considered a type of specialist; the conflict between the information poor and the information rich, an increased class distinction associated with a lack of basic information skills; the future shock of attempting to keep up with rapid change in all aspects of society where availability and possession of information now denotes power; the intellectual property issue involving conflict between ownership and possession, and accessibility and distribution of information. The librarian's responsibility and accountability for the quality of professional practice has never before been of such



A medieval chained book.

vital concern to a society which now considers the major role of the librarian as the "gatekeeper" of recorded knowledge.

The goal of the Faculty is to educate students to achieve excellence in applying theoretical, analytical, and critical skills to the professional practice of library science. The role of the librarian as an administrator, designer of information services, or practitioner, requires continual adaptation to change—the only constant in the dynamic and



An electronic check-point in Rutherford South.

challenging profession of library science. The Faculty recognizes its responsibility to provide a stimulating learning environment for examination and exploration of the theoretical foundations, functions, services, and potential of library and information science (inside or outside the traditional library institutional environment), and to provide for creative investigation and research into specific aspects of library science with particular emphasis on significant Canadian issues.

The objectives of the MLS degree program are:

- 1) to prepare students to select, locate, organize, and disseminate information, and to develop and administer programs of service, in all types of institution environments including the library.
- 2) to provide students with the knowledge of current analytical principles for the organization and interpretation of the intellectual content of print and non-print materials based on intellectual level or subject discipline.
- 3) to introduce students to the theories and concepts of adminis-

tration and organizational behavior, and their application within the context of the information industry as a whole, and the library in particular.

4) to develop the students' abilities to analyse and critically evaluate the utility, performance, and impact of advanced technological applications, including the potentialities and limitations of computer and electronic communications media.

5) to provide students with the knowledge of the social, political, and economic factors influencing the behavior, growth, performance, evaluation and design of activities involved in the provision of information to communities of information consumers.

6) to develop the students' understanding of the principles and methods of research, systems evaluation, and problem solving prior to conducting an investigation of a specific problem of interest to the students.

7) to provide the students with an opportunity to expand and develop individual interests in an area of specialization within or related to library science.

8) to develop the students' ability in decision making; ability to predict the impact of decisions under varying social, economic, political, and organizational conditions; ability to design selective feedback mechanisms for monitoring and comparing actual behavior and performance; and the ability to evaluate objectively the entire organizational pattern of an information system adjusting the system parameters to match environmental constraints with priorities in order to achieve long-range and short-range system objectives.

The responsibility of the Faculty includes the provision for encouraging professional development programs for librarians in the prairie provinces and for the delivery of continuing education programs to practising librarians in Saskatchewan and Manitoba as well as Alberta.

Graduates of the Faculty should be able to make decisions and either implement them in practice or administer an implementation program. The decision-making

ranges from determining the most effective way to answer a reference question to managing the re-organization of the information services of an entire institution. Graduates of the Faculty have a professional obligation to make an active and intelligent contribution to the profession, if only through assuming responsibility for ensuring a high standard of quality of their own professional conduct and practice.

Significant changes in a well established profession cannot be accomplished overnight. Library science, perhaps more than any other profession, has arrived at a critical juncture at which it desperately needs research to provide a firm foundation for future development. The traditional bibliographic emphasis is alone no longer adequate to meet the changing needs to cope with the "information explosion." There is an evolving recognition that library science has its own area of human experience to analyse, its own body of descriptive and factual data, its own conceptual schemes to formulate and test. Some of the most critical areas in which research is required are:

Education

The techniques, philosophy, and scope of education for library science.

Use and users

Information and reader services; expressed and unexpressed goals for different kinds of users (students, specialists and the public); variations in user patterns caused by geographic, economic, social, or other factors.

Organization of library and information services

Administration, management, personnel (including manpower utilization, staffing, labor relations), finance, government relations.

Role of libraries and information centres in society

Purposes, values, goals, relationship with other educational and cultural institutions; influences of various communications media; public relations; recruiting; the library science profession.

Integration of library services in

school and academic instructional programs

Curriculum development, planning; instructional programs at the elementary and secondary levels.

Control of resources

Documentation; book, card, micro-image catalogues; subject analysis; classification; indexing; abstracting; provision of an optimum collection for communities of users; network and systems planning and analysis; automation (software).

Technology

Preservation of materials; storage and physical access; reprography; automation (hardware).

Among the forms in which research is undertaken in library science are:

State-of-the-art studies

Collection and integration or interpretation of existing research.

Feasibility studies

Identification of the need for and feasibility of research, development, or other research-related activities within a clearly defined subject field.

Prototype development and hypothesis generation

Formulation of an hypothesis or the development of a model to aid in the solution of a problem.

Testing and evaluation

Test of hypotheses or models in a controlled situation and evaluation of the results.

Demonstration and implementation
Application of the generalization to a non-controlled situation to verify and, if necessary, to modify the formulation developed.

It should be recognized that little precedence for the research activities described exists in Canada. The Faculty, which has been increasingly turning its attention to research activity, must play a leading role in developing a more vigorous attitude in this area of library science.

Enrolment

When the Faculty was first established, it was assumed that there would be steady growth in number of students and faculty. Economic constraints, however, have slowed the prospects of

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Office of Community Relations
423 Athabasca Hall
The University of Alberta

Telephone: (403) 432-2325
Director: W.A. Presheing
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growth considerably. The Faculty has a quota of 35 students with the prime constituency extended beyond Alberta to include Saskatchewan and Manitoba. The majority of students come from Alberta, Saskatchewan and Manitoba in that order, but students are also accepted from all Canadian provinces and applications are received from the United States, Latin America, and "third world" countries. Graduates are employed primarily in the prairies, but have also found positions in other provinces, in the United States, Great Britain, Australia, Scandinavia, Latin America, Africa and India.

Enrolment stability has been reached with a quota of 35 students in the first qualifying year. Under the quota, the Faculty accepts less than one-half the number of applicants to the program. This normally results in a student population of 70 full-time students in the two years, plus additional part-time students. With an approved academic staff complement of ten faculty members, only achieved in 1980, and with limited physical facilities, it is unlikely that any substantial increase in student enrolment will be possible, or desirable, in the near future. The faculty is responsible for 42 separate courses in the two years of the program in addition to supervising thesis and non-thesis projects.

During the period 1969-76, 397 students graduated with the BLS degree. An additional 891 students from the Faculty of Education and 224 special students have completed library science courses.

Employment

Since 1978, 120 students have graduated from the MLS program, including those intending to graduate in the spring of 1981. Employment prospects for graduates are inevitably fewer than they were in the 1960s. However, with steady, if modest, expansion in the number of positions in Alberta and, to a lesser extent, in Saskatchewan, career opportunities in the prairie provinces are probably the best in Canada. The number of gradu-

Faculty of Library Science Initial Placement and Salary, 1980 Graduates

Total number of graduates:	27
Questionnaire responses:	21
<i>Placement</i>	
Professional permanent placement in library or information-related position	85
Professional temporary placement	5
Non-library or non-professional placement	10
<i>Type of library (20 responses)</i>	
Public library and library systems	15
Elementary and secondary school systems	5
College, university libraries	55
Special libraries, including government	20
Other: information consultant	5
<i>Location (20 responses)</i>	
Alberta	80
Saskatchewan	5
Manitoba	5
Other Canadian provinces	10
<i>Salary, full-time professional positions (17 responses)</i>	
Minimum	\$12,000
Maximum	29,900
Mean	18,128
Median	16,700
Mode	16,000-\$16,700

ates and positions available locally appear to be matched fairly closely. A much less buoyant employment situation in Ontario, where there are two large library schools, provides considerable competition as the Ontario graduates look west for employment. The mobile graduate, anywhere in Canada, has reasonable expectations of a position. The graduate unable to relocate from a particular city or region may have to search diligently for a permanent position. Part-time and short-term employment is normally available, and very few graduates need wait more than a year for permanent employment, although not necessarily in the preferred areas of specialization or interest.

The 1980 statistics in the table above, seem rather encouraging, especially when compared with other parts of Canada. Most interesting is the apparent increase in university library as opposed to special library positions.

As the prairie region has been somewhat tardy in developing libraries, there is a sense of a need to catch up quickly with the rest of Canada. As a result, responsibility and promotion often come early. Graduates of the Faculty are already chief librarians in universities and colleges, in regional libraries, branch libraries or large urban systems, and in government and business libraries of varying sizes. At the assistant chief librarian level, graduates may be found in national libraries, provincial libraries and public libraries. A considerable number of graduates are seasoned middle managers, in both the traditional management situations and in charge of systems development in the widespread move to automated services. The librarian is no longer confined by the walls of a public service institution. Businesses large and small, banks, research establishments, lawyers' offices, hospitals, and government

departments, realizing the benefits of rapid, accurate, current information, are setting up their own libraries and information centres, sometimes their own computer-based networks, employing special librarians. In the last decade, the position of consulting librarian has emerged, selling services for a fee, identifying a client's specialized information requirements and providing individualized information services. The consulting librarian is either self-employed or a member of an information consulting group. Several graduates have established their own consulting firms. In this arena of library science, experience, competence, imagination and salesmanship are imperative to attain success. There are also career opportunities with the commercial producers of data bases, with publishers and booksellers. At least one graduate has found a position in publishing. Opportunity for career advancement exists in speciality areas throughout the information industry offering exciting and challenging professional prospects in addition to the traditional "library" environment.

Continuing Education

As prairie libraries and librarians strive to keep up with and perhaps surpass developments elsewhere in Canada and the United States, a demand for continuing education has developed. To meet the demand, more of the regular courses are made available in evenings and in special sessions, especially summer sessions, when it is feasible to bring in specialists to extend the expertise available within the Faculty. Courses in archives administration, legal bibliography, and law librarianship have been recently offered and others are planned.

A survey sponsored by the Faculty was completed in the autumn of 1980, identifying the requirements of libraries in the prairies for continuing professional education. It is still in the process of analysis but is already providing guidance both for course revision within the MLS program and for the type of contribution



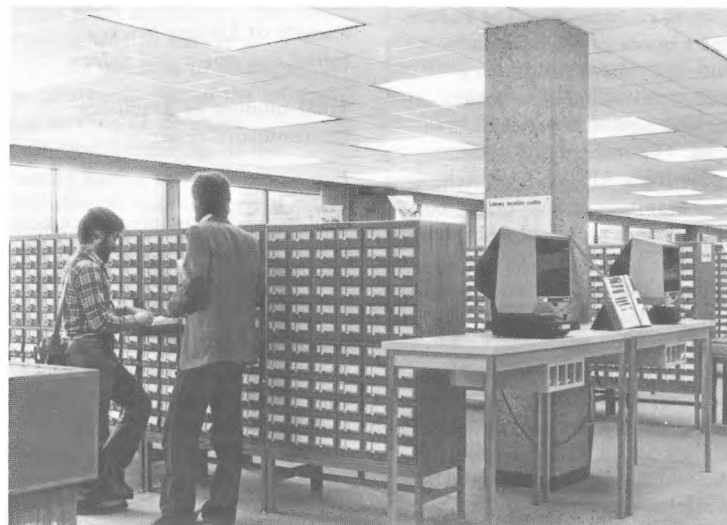
A sixteenth century findings list (on bench ends).

that can best be made by the Faculty toward professional development. It is clear that the demand for education in management and automation is paramount. It is also clear that budgetary limitations of libraries make it very difficult for professional staff to obtain release time to attend courses if they must leave their place of employment to do so. Efforts to provide off-campus and out-of-province courses to help meet these demands have met with limited success. Given a scattered population of librarians, it is difficult to find enough subscribers wanting the same course at the same time. Distance education possibilities



A book catalogue.

are being closely monitored but again, because of the small and scattered audience, they are still economically unfeasible. In both cases, the local resources for supporting degree courses and research are, in many cases, insufficient, presenting a considerable impediment to offering a course. The survey appears to indicate that efforts should be made to provide specific, single-topic seminars or workshops which could be organized in conjunction with provincial library authorities and library associations. If appropriate, successful programs will be moved from centre to centre to respond to the most immediately identified areas of interest and concern. □



Card and micro-catalogues in Rutherford North.

W. J. Downs, 1911-1980

William J. ("Bill") Downs, a distinguished graduate of The University of Alberta, died suddenly of a heart attack at his home in Victoria, BC, on 23 December 1980. The son of A.W. Downs, first professor of Physiology at the University, Bill enrolled as a freshman in the Faculty of Arts and Science in September, 1926, at the age of fifteen and graduated in 1930, having attained First Class General Standing in the last three years of his course. He maintained this record in the first year of his course in Medicine, winning the scholarship of the college of Physicians and Surgeons. After completing two years of basic medical sciences here he entered McGill University to complete his clinical studies, graduating with the MD degree in 1934.

Dr. Downs returned to Alberta and practised in the Baker Tuberculosis Sanitarium in Calgary before joining the Royal Canadian Army Medical Corps in World War II rising to the rank of Lt. Colonel while serving in London, Ontario. Shortly after the war, he joined the staff of the Aberhart Memorial Sanitarium in Edmonton where he remained

until his retirement in 1970. He was an active member of The University of Alberta Colloquium from its inception.

Dr. Downs is survived by his wife, Marjorie, daughter of the late Vernon Barford, and by two

daughters, Barbara in Vancouver, and Catherine in Regina. Mrs. Downs was a supporter of the Women's Symphony Society and of the Friends of the University of Alberta and served as President of both organizations. □

Tall Tales and Tacitus

The University's Department of Classics is considering the compilation of a collection of memoirs covering interesting personalities and episodes in the seventy-five years of the Department's history. It is hoped that, should suitable materials be found, these memoirs might be published as part of the University's 75th anniversary celebrations in 1982-83.

The Department of Classics is as old as the University itself. At the first Convocation on 13 October 1908, it was reported that at the second meeting of Senate (6 July 1908) William Hardy Alexander had been appointed Professor of Classics. (Convocation at this time comprised all resident graduates of British and Canadian universities who had

registered by a certain date. There were 364 such people.)

In 1912, the University awarded its first degrees. At that May convocation, the University's first Master of Arts degree was conferred on Walters Farrel Dyde. That degree was earned in Classics. So too was one of the first four honors BA degrees awarded at the same convocation—to Albert Edward Ottewell.

The Department of Classics, therefore, would welcome any contributions from *Folio/New Trail* readers. These should be sent to the Administrative Assistant, Department of Classics, Humanities Centre, The University of Alberta, Edmonton, Alberta, T6G 2E5. □

Dollar Turnover Enormous

Take a close look at The University of Alberta in the clear light of day and you may discern a greenish tinge. No, a chemistry experiment hasn't backfired. The source of the coloration is the great many dollar bills that the University generates each year. As detailed in a study conducted by the Management Advisory Institute on campus, the University socked about \$230 million into the Edmonton area economy during the year ended 31 March 1980. The study was undertaken to "make salient the benefit of The University of Alberta to the economy and people of Alberta."

In looking at this flavorful financial pie, the Institute saw that goods and services purchased through the Purchasing Department were valued at \$26.3 million. Seventy percent or \$18.4 million of this slice was spent locally. It should also be noted that only ten percent of the funds spent by the Departments went to foreign suppliers.

In 1979-80, the University employed 4,800 people on a regular basis, plus an additional 2,300 part-time staff and graduate students. Gross salaries and wages paid to staff (excluding graduate students) amounted to \$132.5 million which translated into \$96.6 million in take-home pay. The majority of this disposable income was spent locally, the study reported.

During the 1979-80 winter session, about 1,100 students on foreign visas attended the University. It was determined that each student spent an average of \$6,000 which came to \$6.6 million. Also, 1,500 Canadian students from outside Alberta spent an estimated \$7.6 million in Edmonton for a total contribution to the local economy by out-of-province students of \$14.2 million.

Conferences, seminars and symposia were very relevant to the scheme of things. Over the twelve-month period June 1979 to June 1980, approximately 77,000 visitor days were generated. This figure, when multiplied by the

average expenditure per day, revealed that visitor spending heightened the economy to the tune of \$7.2 million.

The study estimated that University generated identifiable expenditures from outside the province of \$36.8 million excluding, for example, funds spent on contract research.

By adding together staff disposable income (\$96.6 million); direct local expenditures, excluding capital construction (\$18.4 million),

and out-of-province contributions (\$36.8 million), we find that the initial direct impact of the University on the regional economy was \$151.8 million.

Now the kicker. The study says it is recognized that for every dollar spent directly, additional expenditures are generated—the so-called "multiplier effect." According to the study, "a conservative estimate of the appropriate multiplier for Edmonton is 1.52, resulting in a total direct

impact in this area amounting to \$230.7 million."

Consideration was also given to the suggestion of various studies that for every \$1 million of University expenditures, ninety-one non-university jobs are created. This would mean, says the study, that there are some 21,000 people employed in Alberta outside the University who owe their jobs to the existence of the University. □

Chemistry Department Emphasizes Safety

Increasingly, public attention is being directed at the handling—and in particular, the disposal—of the numerous hazardous materials of our industrialized society. And almost daily, it seems, the list of substances found to be in some way toxic grows.

By the very nature of its endeavor, the Department of Chemistry on campus must handle, store, and dispose of virtually hundreds of hazardous substances. Some are extremely flammable, other corrosive, others toxic or potentially toxic. Recently *Folio/New Trail* joined R.J. Crawford and F.F. Cantwell for a tour of the Chemistry Department to see some of the measures taken to ensure safety.

Dr. Crawford is the Chairman of the Department; Dr. Cantwell chairs the departmental safety committee. Both expressed pride in the commitment to safety.

"If any university department in Canada is doing a good job in this area, we are," said Dr. Crawford. To support his statement, he points to the large number of letters received from other universities requesting information about the Department's safety program after it was given exposure at a half-day session during the Department's annual "Teaching of Chemistry"

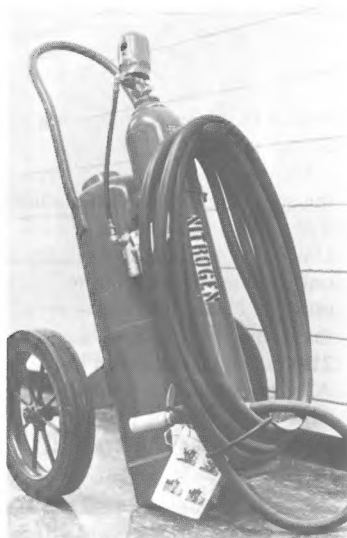


seminar held last fall. "Clearly, we are playing a bit of a leadership role."

The chemists do not claim that everything is perfect: "We're not saying that there are no problems," said Dr. Cantwell, "but we have developed a system designed to bring dangerous situations to light, so that we can deal with them." That system includes a twice-annual safety inspection of every area in the Centre, except for clerical or staff offices. Checklists left for the attention of the person responsible for the area detail shortcomings to be remedied.

A very basic precaution brought to attention throughout the Chemistry Centre tour was good ventilation. The Centre itself is equipped with a ventilation system that ensures a continuous change of air. Chemical storerooms are ventilated even better—standing at the doorway or at the dispensing counter, one is aware of a distinct inward breeze. Many chemicals are stored in custom cabinets with perforated backboards which allow efficient exhausting; other chemicals are stored in special ventilation chambers.

Accessible from the basement of



the Chemistry Centre is a specially-built solvent storage area. Being a long way from major suppliers, the Department is forced to buy large volumes of many potentially dangerous solvents, often a year's supply is purchased at one time. There is a silver lining in this cloud, however: discounts for large volume purchases and the special storage area allows the solvents to be kept safely.

The solvent storage area is equipped with sensitive heat detectors, and should any undue change in temperature occur, the safety system goes into operation: A buzzer warns people inside that they have 30 seconds to leave the area; then the entire storage area is flooded with carbon dioxide to choke any fire before it becomes established. Should an explosion occur in spite of these precautions, special blowout roofs would direct its force upward, rather than into the Centre where people might be working.

The chemists pointed out other safety precautions throughout the building: fire extinguishers, dry and liquid, which dot the hallways; a large dry-type fire extinguisher on wheels in the corridor near the laboratories; explosion proof light fixtures, shielded to prevent sparking; emergency showers in every laboratory; and large cabinets of emergency supplies, rigged so that an alarm sounds whenever one is opened.



Of course much of the safety equipment is useless if it is not used properly. That is addressed by safety seminars organized for staff and students at least two times per year. In the future, the Department will be conducting similar safety seminars for high school teachers.

The disposal of toxic wastes is another area of concern. In accordance with a program established a number of years ago, each laboratory is supplied with containers for hazardous wastes to prevent their disposal down the sink drains. The containers, one for flammable liquids and another for non-flammables, are emptied regularly and the wastes sent to the University's Ellerslie disposal site. There, most wastes can be rendered innocuous in the special furnaces; some, however, must be sent to places as remote as Oregon or Ontario for proper disposal.

Folio/New Trail's tour also included a visit to the "morgue" to which leftover exotic chemicals are sent. Researchers are encouraged to assign chemicals that they will not likely be using again to the "morgue" and to check there before ordering uncommon compounds. Twice a year, one of the storemen visits each Chemistry laboratory to collect materials no longer in use, and many end up in the "morgue." Not only is this recycling economical, but it is a safety measure in that it keeps chemicals not in use off the

laboratory shelves and lessens the risk of improper disposal.

The tour of the Chemistry Centre ended in Dr. Cantwell's office with a discussion of some of the other ways in which safety is enhanced in the Department. This included the Laboratory Manuals which contain the experiments normally assigned to student. Produced by the Department itself, they are revised annually to take into account the latest

findings about hazards associated with different chemicals.

Another safety resource to be ready next fall is a manual now in the final proof form. Prepared within the Department, it lists in alphabetical order some 150 chemicals and gives information about their hazardous properties, together with information about how they can be made innocuous (which is very often possible) or disposed of safely. □

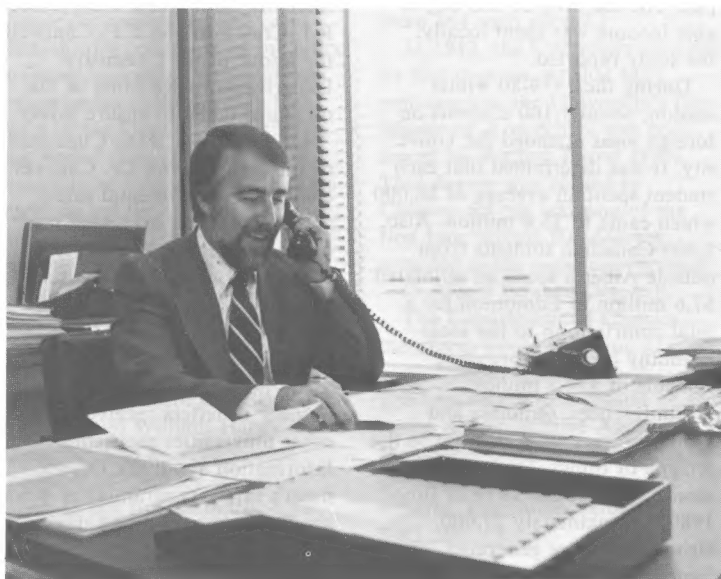
Tom Collier Means Business

For Tom Collier, a change of jobs has brought on new work vistas but not a change of scene. Mr. Collier, formerly Managing Director of the Management Advisory Institute located in 215 Central Academic Building (CAB), is now Assistant Dean for External Affairs, Faculty of Business Administration and Commerce. His new address is 207 CAB. One thing that the physical move accomplished was to bring him a few steps closer to the office of R.S. Smith, Dean of the Faculty. Mr. Collier is striving to make the Faculty better known in the business world, a mission that has Dean Smith's unbending support.

By improving communications, Mr. Collier will help the Faculty to meet the needs of the manage-

ment community in an increasingly effective manner through its educational programs. Increased support from the business community will assist the Faculty in the development of a pool of highly skilled management educators and researchers at the University. Mr. Collier notes that this will enable the Faculty to be more responsive to the business community's needs, including the area of executive development.

After earning his MBA from The University of Alberta in 1970, Mr. Collier worked in California and Ontario prior to return to Alberta in 1977. He served as Managing Director of the Management Advisory Institute from September 1977 to February 1981. □



The Bears and Pandas: A Summary of the 1980-81 Season

The 1980-81 athletic season brought three Canadian Inter-university Athletic Union (CIAU) championship pennants to The University of Alberta. In November, the Football Bears won their first College Bowl since 1972 by defeating the Ottawa Gee Gees in the National final, and later that same month the Golden Bear Cross Country team won their first ever national championship. Another "first ever" title came in March, when the Volleyball Golden Bears captured the men's CIAU championship. Athletes from nine varsity teams admirably represented The University of Alberta in national championships in 1980-81.

Six University of Alberta teams clinched Canada West University Athletic Association pennants this past season, including Football (Western Intercollegiate Football League), Men's Cross Country, Wrestling, Men's Volleyball, Men's Gymnastics and Women's Track and Field. Overall, the year turned out to be an improvement over 1979-80, when the University's teams won two CIAU championships and five conference titles.

Basketball

Pandas

Coach *Debbie Shogan* guided the Pandas (13-7) to a third place finish in Canada West this past season behind Victoria (19-1) and Calgary (16-4).

Veteran *Trix Kannekens* was selected to the CIAU All-Canadian team for the third time in her five-year career. The 6'1" post from Stettler, Alberta, surpassed the 1,000 career point plateau in 1980-81, becoming the Pandas All-Time leading scorer. Kannekens finished her illustrious career with 1,318 points, a career average of 14.3 points per game. Trix finished second in conference scoring with a career high 380 points in her final year.

Sophomore forward *Annette Sanregret* was the Pandas second leading scorer with 177 points in



The Volleyball Bears won their first-ever CIAU National Championship in 1980-81.

18 games. For Kannekens, *Glynis Griffiths* and *Sarah Van Tighem*, 1980-81 was the final year of university basketball with the Pandas.

Bears

It was a trying season for *Brian Heaney's* Basketball Bears who finished in the Canada West basement with a 2-18 record. The Golden Bears were a youthful squad in 1980-81. Of the thirteen players who wore a green and gold uniform this past year, nine were either rookies or sophomores.

Injury problems as well as inexperience hampered the Bears as promising 6'8" rookie *Greg Dell* and *Grant Ashlee* were both felled with knee injuries midway through the campaign. Both

required surgery and missed the balance of the season.

Ken Haak, a 6'5" sophomore from Edmonton, was the only Golden Bear to finish in the top ten in conference scoring. Haak scored 303 points in 20 games (an average of 15.2 ppg) to finish eighth in Canada West scoring.

Fifth year veteran centre *Tom Groat* finished his university career in 1980-81, scoring a career high 251 points in 20 conference games. Groat is the only graduating player from this year's Golden Bear squad.

Cross Country

In November of 1980, the Golden Bear cross country team won their first ever CIAU National Championship. Coached by *James Had-*

dow and *Gabor Simonyi*, the team included *Darrel Menard*, *Riyadh Karmy-Jones*, *Kim Maser*, *Adrian Shorter*, *Jim McGavin*, *Blair Rosser*, *Brian Rhodes* and *Ken Rebel* (Alternate). Brian Rhodes was Alberta's top individual finished placing sixth. The Bears edged out Saskatchewan in the Canada West Championships to advance to the CIAU championship in Guelph, Ontario.

Meanwhile, the Panda cross country team finished a close second to Victoria in the Canada West championship at Lethbridge

Diving

Despite having only three team members, *Don McGavern's* Golden Bear and Panda divers almost upset the University of Calgary at the 1980-81 Canada West University Athletic Association championships. Calgary edged Alberta 62-60 to win the conference diving crown.

The Canada West diving meet was highlighted by the record-setting performances of Rookie *Cindy Swartzack*. Cindy established new conference records in winning both the one metre and three metre women's events. Sophomore *Allison Godfrey* also performed well, finishing third in both women's diving events.

On the men's side of the competition, *Glen Music*, well known for his exploits on the football field in the fall of 1980, finished second to conference champion *Mike Mourant* (Calgary) in the one metre event, and fourth in the Canada West three metre event.

All three divers qualified for the CIAU National Championships in March at the University of Toronto. A third place finish by *Cindy Swartzack* in the women's one metre event was the top individual performance at the nationals for the Alberta squad.

Field Hockey

The Panda Field Hockey squad, under rookie coach *Jan Henderson*, finished the season with a 4-6-2 record, good enough for

third place in the five team Canada West conference. The Universities of British Columbia and Victoria finished first and second respectively.

The Pandas were led by scoring sensation *Dru Marshall*, who finished in a tie for the Canada West scoring title with UBC's *Dana Sinclair*. Both girls scored 16 goals in 12 games.

Football

On 29 November in Toronto, the Golden Bears captured the Canadian College Bowl by defeating the University of Ottawa Gee Gees 40-21 before 11,000 fans and a national television audience.

The College Bowl win was Alberta's first since 1972. The Bears who finished the WIFL season in first place with a 6-2 record, advanced to the national final by defeating Calgary in the WIFL Final (22-14) and Western Ontario Mustangs in the Western Bowl (14-4).

The Bears then faced the Ottawa Gee Gees in the College Bowl, a team Alberta had never met before in College football competition. On game day, the Bears began an explosive offensive display by scoring on their first possession, a fifty-four yard touchdown pass from *Forrest Kennerd* to *Peter Eshenko*. Alberta scored four more touchdowns in the second quarter as the green and gold rolled to a monstrous 35-0 half-time lead. Split end, *Peter Eshenko* was sensational in catching three touchdown passes in the first thirty minutes.

Ottawa, under CIAU "Coach of the Year" *Cam Innes*, managed to revive its offense in the second half, but the Bears went on to win the high-scoring contest by a score of 40-21, capturing The University of Alberta's first College Bowl since 1972.

Sophomore quarterback, *Forrest Kennerd*, completed 16 out of 29 passes for 316 yards, a new College Bowl record. For his truly remarkable performance, *Kennerd* was voted the "Most Valuable Player" in the game. *Peter Eshenko*, who caught three touchdown passes from *Kennerd*, was named "Offensive Player of the



1980 College Bowl champions Golden Bears defend against the University of Calgary Dinosaurs.

Game," while safety *Gord Syme*, (the only Golden Bear named to the 1980 All-Canadian team), who scored one touchdown on a forty-five yard interception return, was named "Defensive Player of the Game."

Nine Golden Bears were named to the WIFL All-Star team in 1980. On offense, *Percy Gendall*, *Rick Henschel*, *Elwin Worobec*, *Peter Eshenko* and *Sean Kehoe* were selected. Defensively, *Rollie Miles*, *Lawrence Nagy* and *Gord Syme* were named conference all-stars. *Dave Brown* was selected as the WIFL's top punter.

Running back *Sean Kehoe* was named the "Most Outstanding Player in the WIFL" in 1980.

Gymnastics

Bears

The Golden Bears came closer than any team in years of upsetting perennial national men's gymnastics champions, York University. At the CIAU's in Calgary, York edged a strong Alberta team 161.25 to 155.70 to win the 1980-81 title. The Bears improved greatly on their sixth place team finish in 1979-80.

Individually, *Allan Reddon* was Alberta's top performer, finishing third overall. *Reeve Martin* finished fifth overall and won the gold in the pommel horse event. *Eric Ruckenthaler* was tenth, while *Brendon Carrigy* finished eighteenth overall.

Francis Tally's Golden Bears outscored York in two events, the floor exercise and the vault.

Allan Reddon and *Reeve Martin* were named national meet All-Stars, while *Reddon* was also selected as an All-Canadian in 1980-81.

The Golden Bears were Canada West champions this year, edging out the University of British Columbia by 21 points in the team standings at the conference meet in Winnipeg.

Allan Reddon was the overall Canada West champion, and *Reeve Martin* was second. *Eric Ruckenthaler* was fifth, *Brendon Carrigy*, sixth and *Dale McNeeley* was twelfth. *Randy Hauck*, *Arnie Ness*, *Erick Erickson* and *Claude Wood* also competed for the Golden Bears at the Canada West meet.

Pandas

The Pandas, under rookie coach *Sue Rouse*, finished a close second to UBC at the Canada West championships, and sixth at the nationals. *Trish McMillan* was Alberta's top female performer at the CIAU Championships, finishing seventh overall. *Jane Chamberlain* was twenty-seventh, *Audrey Gee* was twenty-eighth, and *Noreen Skoreyko* was thirty-fourth.

At the conference meet, *Trish McMillan* finished fourth overall, *Audrey Gee* was seventh, *Jan Gorgichuk* was eighth, while

Noreen Skoreyko and *Jane Chamberlain* were tied for tenth overall. *Kim Douglas* was also a member of the Pandas Canada West meet team.

Individual honors went to *Trish McMillan*, who was named a CIAU "All Canadian" gymnast in 1980-81.

Ice Hockey

After winning three consecutive CIAU National Hockey Championships, the Bears stumbled to a third place finish (10-14) record in Canada West in 1980-81. The Golden Bears missed the conference playoffs for the first time since 1962-63, and finished with a losing record (below .500) for the first time in almost thirty years (since 1952).

Clare Drakes' squad, however, salvaged the season to some degree by winning the gold medal as Canada's representative at the World University Games in Jaca, Spain. Supplemented by former Golden Bears *Randy Gregg* and *Larry Riggan*, and three UBC Thunderbirds (*Ron Paterson*, *Bill Holowaty* and *Jim McLaughlin*), the Bears were undefeated in four tournament games. Victories over Spain (9-0), Japan (7-3), Korea (31-0) and Finland in the gold medal match (6-1) earned Canada first place in the tourney.

Fourth year veteran *Jim Lomas* led the Bears in scoring in 1980-81 with 34 points, third best in Canada West. *Chris Helland* finished the year with 28 points. *Helland* graduates as the Bear's All-Time Leading Scorer (59 goals, 78 assists for 137 points in 92 games). *Helland* and *Lomas* were both named to the second Canada West All-Star team in 1980-81.

Soccer

In the fall of 1980, the soccer Bears were hard pressed to repeat their tremendous feat of 1979 (CIAU National Championship) in a very competitive Canada West conference.

Too many ties (four in eight games) proved to be the downfall of this year's squad, as the Bears finished the regular season with a 2-2-4 record. Alberta, under

Folio/New Trail Campus Supplement

service information

Coming Events

Music

Jubilee Auditorium

Until 8 May. 9 a.m., 1 p.m.
and 7 p.m. daily. Kiwanis Music
Festival. Tickets: At the door.
9 May. 8 p.m. Les Ballets Trockadero.
Tickets: Bass.
14, 16 and 18 May. 8 p.m. The
Edmonton Opera presents "Nabucco."
Tickets: Mike's, HUB and Opera
Box Office.
15 May. 8 p.m. Liona Boyd in concert.
Tickets: Mike's, HUB, West Den.
17 May. 8 p.m. Edmonton Jazz Society
concert. Tickets: Mike's, HUB, West
Den.
20 and 21 May. 8 p.m. Alberta Ballet
Company. Tickets: Bass.

Edmonton Philharmonic Society

10 May. 2 p.m. The Society's Spring
Concert will be held in the Provincial
Museum. Admission free.

Alberta College

International Concert Series
11 May. 8 p.m. Franco Gulli, Enrico
Cavallo and James Keene with the
Edmonton Chamber Players Orchestra.
Robertson-Wesley United Church,
10209 123 Street.

Winnipeg Girls' Choir

15 May. 7:30 p.m. A concert will be
held in Robertson-Wesley United
Church, 10209 123 Street. Tickets:
at the door.

Films

Provincial Museum

9 May. 2 p.m. "Strange Creatures of
the Night."
10 May. 4 p.m. and 7 p.m. "The

Oldest Wonder—The Pyramids."
"Ancient Egypt."

Edmonton Film Society

"British Classics"

13 May. 8 p.m. "Importance of Being
Ernest" (1952).
20 May. 8 p.m. "Black Narcissus"
(1947). All films will be shown in Tory
Lecture Theatre. For ticket information
please call 488-4335 after 4 p.m.

Theatre

Theatre Network

Until 9 May. "Rumpelstilzkin
Busts Out" a rock musical by
E.H. Carefoot. Tickets: 474-6111.

Studio Theatre

Until 9 May. 8 p.m. "Julius Caesar"
by William Shakespeare. Tickets and
information: 432-2495.

Workshop West

13 to 24 May. "Le Temps d'Une Vie"
by Roland Lepage. Tickets: 424-2422.

Exhibitions

Provincial Museum

Continuing. "Bears of Canada." An
exhibition featuring black, grizzly and
polar bears. East Alcove.
Continuing. "Nag Hammadi" a collec-
tion of thirteen papyrus codices found
in 1945 near the Nile. Human History
Gallery.

Continuing. "Elitekey" an exhibition of
Micmac material culture. Feature
Gallery #3.

Edmonton Public Library

Foyer Gallery

Until 27 May. Alberta Professional
Photographers Show. An exhibition
consisting of a full range of subject
matter.

Photography Gallery

Until 29 May. "Landscapes of Elk
Island National Park," an exhibition
of black and white photographs by
Gerald Westerman.

Students' Union Art Gallery

Until 29 May. Ceramic Sculpture
Invitational Exhibition. (Opening
4 May, 8 p.m.).

Ring House Gallery

Until 10 May. "John Freeman:
Recent Works on Paper," an exhibition

of spatial studies in a variety of
mediums.

Until 21 June. Rada Greg. An
exhibition of oil paintings by
Toronto folk artist Rada Greg.

Multicultural Heritage Centre

Until 2 June. Sculpture by Elaine
Classen and watercolors by Bill Quast.
10 May. Mothers' Day Activities.
Bargello demonstration.
12 May. "Madukaego," a demonstration
of Nigerian wood carving.
Settlers' Cabin a "living museum"
of pioneer and ethnic crafts.
Handicraft Store features work by
local artisans.
Library and Archives with pioneer
photographs, tapes and maps.
Homesteaders' Kitchen serves lunch
daily (except Mondays) noon to 2 p.m.,
coffee and dessert 2 p.m. to 4 p.m.,
and dinner Thursday evening from
5:30 p.m. to 7 p.m.
The Heritage Centre is located at
5411 51 Street, Stony Plain. Telephone:
963-2777.

Latitude 53 Society of Artists

Until 29 May. Clay Works—Western
Canadian Ceramics Show.

University Special Collections

Until 6 July. "Shakespeare: Printed,
Performed and Perverted." B37
Cameron Library. Opening hours
8:30 a.m. to 4:30 p.m. Monday to
Friday.

St. Albert Arts and Crafts Guild

9 May. 11 a.m. to 4 p.m. Annual Patio
Sale. St. Albert Arts Centre. For more
information: 458-0279.

Edmonton Art Gallery

Volunteer Tour Guides required. For
information please call 429-6781.

Alberta Natural Resources Science Centre

Until 31 May. "Understanding Clay" an
exhibition of the chemical and geological
answers to what clay is.
The Centre consists of six permanent
pavilions with displays that describe
and interpret how Alberta's natural
resources are put to use. Opening
hours are Saturdays and Sundays from
11 a.m. to 5 p.m. School tours are
available Monday to Friday. Admission
and parking are free. The Centre is
located east of Edmonton at the new
Strathcona Science Park. For further

information and bookings phone
427-9490.

Devonian Botanic Garden

The Garden will be open to the public
from May to September as follows:
Weekdays 10 a.m. to 4 p.m. Saturdays,
Sundays and Public Holidays 12 noon
to 6 p.m. Tours can be arranged by
calling 987-3054.

Rutherford House,

11153 Saskatchewan Drive

The restored home of Alberta's first
premier, A.C. Rutherford, is located on
the University campus. Staff in period
costumes show visitors through the
house. Open Monday to Friday, 9 a.m.
to 5 p.m., Saturday and Sunday,
12 noon to 6 p.m. From 16 May until
Labor Day, open daily 10 a.m. to
8 p.m. Group tours may be arranged by
calling 427-5708 at least one week in
advance. Free.

Lectures and Seminars

Population Research Laboratory

14 May. 11 a.m. "Underenumeration
in Canadian Census and its Ramifi-
cations" by K.G. Basavarajappa,
Statistics Canada. 5-15 Tory Building.

Alcoholics Anonymous

8 p.m. Monday evenings. St. Joseph's
College.

Canadian Population Society

—Edmonton Chapter

15 May. 11:30 a.m. K.G. Basavarajappa,
Statistics Canada, will present "Spouse
Selection in Canada, 1921-78." Fee: \$10.

Attention Readers and Contributors

Please remember that on Monday
and Tuesday, 18 and 19 May,
most University offices will be
closed. Thus, the deadline for
submission of material to *Folio*
for publication on 21 May will be
Wednesday, 13 May at 9 a.m.

For more information please call 432-4659.

Common Woman Books

15 May. 6 p.m. to 9 p.m. Sylvia Van Kirk will discuss her recently published book *Many Tender Ties—Women in Fur-Trade History, 1670-1870*. #222, 8631 109 Street.

The Women's Canadian Club

20 May. 12:15 p.m. "On Being a Canadian Woman Politician" will be presented by Connie Osterman, Conservative MLA for Three Hills. Macdonald Hotel. For more information please call 429-7787, 455-8465.

Students International

Meditation Society

Wednesdays. 12 noon. Introductory lectures on the Transcendental Meditation program. Everyone welcome. 280 SUB.

Children's Events

Provincial Museum

Saturdays. 10 a.m. Craft programs. To register call 427-1766.

Edmonton Public Library

9 and 10 May. "Pemmican Pie" a celebration of Canadian Children's Literature. Details of the program can be obtained by calling 423-2331. Saturdays and Sundays. 1:30 p.m. Films will be shown in the Children's Library Theatre.

Non-Credit Courses

Faculty of Extension

Advanced Workshops in Teaching English

9 May (Beginning ESL Students). Time: 9 a.m. to 12 noon. Fee: \$15. Class limit: 25. Telephone: 432-2497, 432-3036.

Sales Communications

Date: 11 and 12 May. Fee: \$150 including materials and lunches. Telephone: 432-5066/7.

Organizational Diagnosis for Planned Change

Date: 11 to 13 May. Course limit: 40. Fee: \$100. Telephone. 432-5069.

Sueharu Fukami: Porcelain Master

Date: 11 to 22 May. Time: 10 a.m. to 12 noon and 1:30 p.m. to 4:30 p.m. Course limit: 20. Fee: \$280. Telephone: 432-3034.

The Urban Development Industry

Date: 12 May. Time: 6:45 p.m. Fee: \$10. Telephone: 432-2912 or 471-6551.

Employee Work Attitudes in the Public Service

Date: 12 May. Fee: \$85 including

materials and luncheon. Telephone: 432-5052.

Computing Services

Client Training Sessions

Computing Services is taking registrations between 8:30 a.m. and noon for the following non-credit courses. For further information, please telephone Information Services at 432-2463 or come to 319 General Services Building.

Introduction to APAL

Course number: 437. Date: 11, 13, 15 May. Time: 9 a.m. to 12 noon. Fee: \$15. Prerequisites: Knowledge of Chapter 1 of 'Introduction to the Array Processor at the U of A.' Place: 328 GSB.

PLATO Intensive

Course number: 438. Date: 11 to 15, 19 to 22 and 25 to 29 May. Time: 1 p.m. to 3 p.m. Fee: \$40. Place: 249 Medical Sciences Building.

Introduction to Text Formatting

Course number: 441. Date: 20, 22, 27, 29 May. Time: 2 p.m. to 4 p.m. Fee: \$15. Prerequisite: 'MTS and Editor Fundamentals' course and a good working knowledge of the File Editor. Place: 328 GSB.

Introduction to Computing

Course number: 442. Date: 13 May. Time: 2 p.m. to 4 p.m. Fee: \$5. Place: 351 GSB.

MTS and Editor Fundamentals

Course number: 443. Date: 15, 22 May. Time: 1 p.m. to 3 p.m. Fee: \$10. Prerequisite: 'Introduction to Computing' course or equivalent working knowledge of a DECwriter terminal and MTS commands. Place: 351 GSB.

Efficient File Editing

Course number: 444. Date: 15, 22 May. Time: 9 a.m. to 11 a.m. Fee: \$10. Prerequisite: 'MTS and Editor Fundamentals' course and a good working knowledge of the File Editor. Place: 327 GSB.

PLATO Courses

The recent series of PLATO courses will be repeated as soon as there is a minimum waiting list of five students per course. The courses are: PLATO Group Director Functions; PLATO Instructor Files and Routers; Care and Feeding of PLATO Notesfiles, and PLATO Account Director Functions. Each course consists of one three-hour lab. Interested persons please contact the Training Coordinator at 432-2261 or 319 General Services Building between 8:30 a.m. and 12 noon.

Faculty of Dentistry

Division of Continuing Education

The following courses will take place during the month of May. 11 to 16 May. Conscious sedation in dentistry.

15 and 16 May. Removable prosthodontics (Clinical) Part II. For more information please call 432-5023.

Devonian Botanic Garden

Classes in Garden maintenance, alpine gardening and show gardens. Waterbird watching sessions. For registration and information phone 987-3054.

Yoga Association of Alberta

Regular classes and workshops are offered in all parts of the city. For more information call 484-7594.

Notices

Foreign Students and/or Staff

If your spouse or children are attending courses, either credit or non-credit, at any institution, they will require a Student Authorization. This applies to children in grades 1-12 as well as to persons taking courses offered through the Faculty of Extension, City Parks and Recreation, etc. Please contact E. Cherniavsky (432-4588) or Ruth Groberman (432-4145) for further information.

Scholarships, Fellowships and Awards

Jules and Gabrielle Leger

Fellowship

Donor: Social Sciences and Humanities Research Council of Canada. Where tenable: Unrestricted. Level: Graduate "research and writing on the history, role and functions of the Crown and the Governor General in a parliamentary democracy." Studies on the office of the Lieutenant-Governors of the provinces are also eligible, as are studies of a comparative nature between Canada and other parliamentary democracies in the Commonwealth and elsewhere. Value: \$20,000 plus a \$5,000 accountable allowance for research and travel costs. Number: One. Conditions: Applicants must be Canadian citizens, able to devote eight months or more to full-time investigation of the topic, and be of demonstrated competence. Closing Date: 1 October. Further information: Fellowships Division, Social Sciences and Humanities Research Council of Canada, 255 Albert Street, Box 1610, Ottawa, Ontario K1P 6G4.

Canadian College of Teachers

Thesis Awards

Where tenable: Canadian institutions offering graduate degrees in education. Level: graduate. Field: Education. Conditions: Applicants should be prepared to submit one copy of entire thesis. Further information: Ronald E. Johnston, Secretary-Treasurer, Canadian College of Teachers, 7546 10 Avenue, Edmonton, Alberta T6K 2T6.

Research Grants

Granting Agencies:

Application Deadlines

This list of deadline dates for submissions to granting agencies for research funds, exchange programs, and travel grants is published every month in *Folio*. In order to allow sufficient time for processing, all applications should reach the Research Grants and Contracts Office at least ten days before the deadline date. Where other University resources are involved, the time requirement may be much longer than ten days and such applications should therefore be submitted well in advance. An extra copy of the application should be provided for the Research Grants and Contracts Office.

Further information may be obtained by consulting the *Calendar of Granting Agencies for Research Funds, Exchange Programs, and Travel Grants*, which is available in the offices of Deans, Directors of Institutes, Centres, and Schools, and Department Chairmen, or by telephoning the Research Grants and Contracts Office, 432-2002. Note: Although the *Calendar* is updated on a continuous basis, *the following information is subject to change without notice*. If staff members have advance information on forthcoming changes, the Research Grants and Contracts Office would appreciate being advised. Code: (R) Research Funds; (E) Exchange programs; (T) Travel grants. The Calendar Source Number is also given in parentheses.

<i>Granting Agency</i>	<i>Deadline Date</i>
Canada Council—	1 June
Explorations (R) (61)	1 Dec.
	1 Mar.

US Department of Health, Education, and Welfare (R) (420)

<i>Renewals</i>	
	1 June
	1 Oct.
	1 Feb.
<i>New and Supplemental</i>	
	1 July
	1 Nov.
	1 Mar.

Positions Vacant

Non-Academic Positions

To obtain further information on the following positions, please contact Personnel Services and Staff Relations, third floor, SUB, telephone 432-5201. please do not contact the department directly. Positions available as of 1 May 1981.

Clerk (Part-time (Trust)) (\$430.70-\$510.55)—Law Centre
Clerk Typist II (\$474.37-\$566.53)—Continuing Medical Education (Part-time)
Clerk Typist II (\$830.15-\$991.42)—Personnel Services and Staff Relations; University Health Service; Graduate Studies and Research
Clerk Steno II (\$861.22-\$1,030.83)—

Mechanical Engineering; Chemistry; Physical Education
 Senior Clerk (\$893.47-\$1,069.05)—Extension
 Senior Financial Records Clerk (\$922.13-\$1,109.66)—Housing and Food Services; Rural Economy
 Clerk Typist III (\$922.13-\$1,109.66)—Personnel Services and Staff Relations; Student Counselling; Political Science; Central Stores; Administrative Services
 Data Entry Operator I (\$922.13-\$1,109.66)—Computing Services
 Student Record Processing Clerk \$959.16-\$1,157.44)—Education—Student Records Office
 Clerk Steno III (\$959.16-\$1,158.44)—Faculty of Nursing; Library Science; Office of the Registrar; Business Administration and Commerce; Drama; Mineral Engineering (2 positions); Industrial and Vocational Education
 Medical Steno (\$1,030.83-\$1,257.77)—Pediatrics
 Secretary (\$1,069.05-\$1,309.14)—Pharmacy; Pharmacology; Education Clinical Services; R.S. McLaughlin Exam and Research Centre (Trust)
 Payroll Clerk (\$1,069.05-\$1,309.14)—Office of the Comptroller
 Administrative Clerk (\$1,069.05-\$1,309.14)—Personnel Services and Staff Relations
 Departmental/Exec. Secretary (\$1,205.22-\$1,484.74)—Physical Education and Recreation; Personnel Services and Staff Relations; Faculty of Medicine; Office of the Comptroller (Payroll); Nurse Practitioner Program
 Laboratory Assistant I (\$376.86-\$446.74)—Surgical Medical Research Institute (Part-time)
 Building Services Worker I (\$459.31-\$549.78)—Physical Plant (Building Services) (Part-Time)
 Art Technician Demonstrator I (\$654.57-\$808.67)—Art and Design (Part-time)
 Photo Printer I (\$861.22-\$1,030.83)—Anatomy
 Computer Assistant I (\$861.22-\$1,030.83)—Computing Services
 Laboratory Assistant III (\$959.16-\$1,157.44)—Provincial Laboratory
 Building Services Worker II (\$949.16-\$1,157.44)—Physical Plant (Building Services)
 Technical Assistant (\$991.42-\$1,365.29)—Photo Services
 Audiovisual Technician I (\$1,069.05-\$1,309.14)—Audiovisual Media Centre
 Youth Program Assistant (\$1,069.05-\$1,309.14)—Extension (Trust)
 Building Services Worker III (\$1,069.05-\$1,309.14)—Physical Plant (Building Services)
 Partsman (\$1,157.44-\$1,423.59)—Physical Plant—Vehicle Pool
 Laboratory Technologist I (\$1,205.22-\$1,484.74)—Provincial Laboratory (2 positions)
 Technologist I (\$1,205.22-\$1,484.74)—Medicine (Trust)
 Biochemistry Technician II/Technologist I (\$1,205.22-\$1,484.74)—Biochemistry (Trust)
 Biochemistry Technician II (\$1,205.22-

\$1,484.74)—Biochemistry (Trust)
 Biochemistry Technologist I (\$1,205.22-\$1,484.74)—Immunology (Trust)
 Technologist I (\$1,205.22-\$1,484.74)—Immunology (Trust)
 Draftsman II (\$1,257.77-\$1,550.43)—Design and Construction
 Electronics Technician II (\$1,309.14-\$1,617.33)—Chemistry
 Nurse (\$1,309.14-\$1,617.33)—University Health Service
 Electronics Technician II/III (\$1,309.14-\$1,843.07)—Physics
 Electronics Technician II/III (\$1,309.14-\$1,843.07)—Computing Science
 Audiovisual and Video Technician II/III (\$1,309.14-\$1,843.07)—Audiovisual Media Centre
 Technologist II (\$1,365.14-\$1,690.17)—Zoology
 Administrative Assistant (\$1,365.14-\$1,690.17)—Housing and Food Services
 Maintenance Worker (\$1,365.14-\$1,690.17)—Physical Plant (Utilities) (Construction Labourer)
 Technician III (\$1,365.14-\$1,690.17)—Dentistry (Trust)
 Technologist II (\$1,365.29-\$1,690.17)—Dentistry (Histology)
 Maintenance Worker II (\$1,365.29-\$1,690.17)—Physical Plant (Grounds)
 Engineering Technologist III (\$1,484.74-\$1,843.07)—Design and Construction
 Pharmacist (\$1,484.74-\$1,843.07)—University Health Service
 Programmer/Analyst II (\$1,484.74-\$1,843.07)—Office of Administrative Systems
 Electronics Technician III (\$1,484.74-\$1,843.07)—Biomedical Engineering
 Animal Technician IV (\$1,550.43-\$1,924.31)—Health Sciences Small Animal Program
 Farm/Ranch Manager I (\$1,550.43-\$1,924.31)—Soil Science
 Engineering Technologist IV (\$1,690.12-\$2,101.02)—Physical Plant (Energy Management)
 Buyer II (\$1,690.12-\$2,101.02)—Purchasing
 Electronics Technician IV (\$1,690.12-\$2,101.02)—Physics
 Programmer/Analyst III (\$1,763.03-\$2,195.45)—Computing Services (2 positions)
 Building Services Coordinator (\$1,843.07-\$2,296.97)—Building Services (Excluded Position)
 Programmer/Analyst IV (\$2,101.07-\$2,629.04)—Office of Administrative Systems (2 positions)
 Controlsfitter (Term) (\$2,312.27/month) Physical Plant (Maintenance)
 Administrative Assistant II (\$1,550.43-\$1,924.31)—Physical Plant (Vehicle Pool)

The following is a list of currently available positions in the University of Alberta Libraries. The bulletin board in the Cameron Library—Room 512 should be consulted for further information as to availability and position requirements.

Library Clerk II (\$830.15-\$991.42)—Education; Acquisitions; Circulation
 Library Clerk III (\$893.47-\$1,069.05)

—Cataloguing (Added Copies); Cataloguing
 Library Assistant I (\$959.16-\$1,157.44)—Circulation (Term)
 Library Assistant II (\$1,069.05-\$1,309.14)—Cataloguing
 Secretary (\$1,069.05-\$1,109.66)—Education Library

Advertisements

Advertisements must reach the Editor by 3 p.m. on the Thursday prior to publication date which date also serves as the deadline for cancellation of advertisements. The cost of placing advertisements is 30 cents per word with no discount for subsequent insertions. There are no refunds. There is a maximum limit of 30 words and a minimum charge of \$1.50. Contributors' corrections will be assessed at \$1.50 for each line in which an alteration is made.

Accommodations available

For rent—1 Sept. 1981 - 31 July 1982. Furnished, four bedroom, executive home, Aspen Gardens. 435-2412.
 For rent—Three bedroom house, large garden, half block University Hospital. Available 13 June - 25 August. \$450 monthly, damage deposit. 432-0864.
 For rent—London, England, August 1981 for one year, fully furnished, three bedroom house; central heating, garden, off street parking, close to bus, schools, shops; 25 mins. Westend. £225 pm. 469-2033.
 For rent—Executive home, furnished, available summer 1981 to summer 1982. \$1,200/month. 434-7259.
 For sale—Glenora. Four bedrooms, family room, fireplace in living room, new kitchen, three baths. Rumpus room and two bedrooms down. Double garage. Resi Richter. Weber. 483-9432, 455-4135.
 For sale—New homes. Westend crescent location. Resi Richter. Weber. 483-9432, 455-4135.
 For sale—Laurier Park. Executive bungalow. Three bedrooms plus three. Two fireplaces, wet bar, three baths, double garage. Resi Richter. Weber. 483-9432, 455-4135.
 For rent—July-August. Fully furnished bungalow. Walking distance University. Pet. Evenings 436-1704.
 For sale—Windsor Park. 1,245 sq. ft. bungalow. Three bedrooms. Rec. room, two bedrooms, three piece bath down. \$80,000 mortgage. \$152,500. Lori Sansom. 483-5847. Spencer Real Estate 483-7170, 426-5880 #3537.
 For sale—Super starter, two storey, two bedroom town house in Blue Quill. Great buy for students. Price \$65,000. Existing mortgage \$47,000 at 10½%. Faye Lund, Block Bros. 436-4240, 487-2422.

For sale—Older, two storey home, has character. Separate dining room, woodburning fireplace, single garage. Close to University. Pat von Borstel 437-6540, Barbara Allen 434-0729, Spencer Real Estate 436-5250.
 For sale—Beautiful two storey in Groat Estate. Stained glass windows, french doors, fireplace. Three bedrooms, sunroom, custom kitchen. New furnace, wiring. \$126,500. Owner agent. 455-8103.
 For sale—Belgravia. Two storey, four bedroom home. Two fireplaces, four bathrooms, double garage, mint condition. Sale by owner. Good financing, \$147,500. Phone 436-2328 after 6 p.m.
 For sale—Blue Quill. Three bedroom condominium, 1½ baths. Four appliances. Playground close. Reduced to \$56,500. Mortgage \$43,000, 11¼%, three years. 436-9009, 432-2193.
 For sale—Petrolia. Split level. By owners. No realtors. 437-2420.
 For rent—House, furnished, three bedroom, 1½ baths, fireplace, fenced yard, trees, garage. Old Greenfield, 20 mins. to University, good schools. August 1981-summer 1982. No pets. \$750. 435-7561.
 For rent—Westridge, ravine. Executive 2,500 sq. ft., two storey, five bedroom, 3½ baths, pool table, sauna, furnished, no pets, references. 16 June 1981-31 May 1982. 487-5273 after 4 p.m.
 For sale—Executive, cedar townhouses in Riverbend. Excellent Hearthstone complex with fireplace, attached garage. Three bedrooms. Professionally developed basement. Close to University, shopping, recreation. Faye Lund, Block Bros. 436-4240, 487-2422.
 For rent—Furnished, two bedroom apart-ment close to campus and downtown available 1 July-1 Sept. Call Dr. Lowe, 432-3315, 488-2859.
 For rent—Two-bedroom house, with study, fifteen minute walk from campus, available 1 July 1981-1 August 1982. Two Siamese in residence. \$450. References. Phone 432-2180 days, 439-1077 evenings.
 For rent—Four bedroom, split, fully furnished. Sept. 1981-July 1982. No pets, lease, references. Negotiable. 435-3051 after 5 p.m.
 For sale—Groat Estate. Charming older, cedar house, exquisitely renovated, 1½ storey, hardwood, stained glass, fireplace, attached garage, mature trees. \$109,900. Mortgage \$59,000 10½%—1983. John 420-1919 ext 271, evenings 454-4041.
 For sale—Condominium. 82 Ave. 111 St. Two bedroom, 1½ baths, large mortgage at 13% to 1985. \$82,000. 439-4689 evenings.
 Must sell—Executive, two storey, Ermieskin, 2,300 sq. ft., five bedrooms, double attached garage, large yard, fireplace, family room, many extras, large assumable first mortgage. Offers. 468-1424.
 For sale—Walk to University from this cozy, two bedroom bungalow. Cedar siding, excellent condition. Reason-

ably priced. Steve Clark, Royce Realty (1980) Ltd. 436-0444, res. 438-0443.

For sale—Near University. Two bedroom home with den. Exceptional pine interior, hardwood floors, original fireplace, double garage, excellent assumable mortgage. Call Trish Klawe at 436-0444 or 435-7824. Royce Realty

For rent—Furnished, four bedroom, bi-level, Grandview Heights. One year, from August 1981. 434-4935 evenings.

Accommodations wanted

Responsible junior professor wishes to rent sabbatical house. Sept. 1981-April 1982. Single, non-smoker. No pets. References. 432-3463 (days).

Wanted to rent—Three bedroom house, unfurnished 1 June 1981 for year. Executive, wife returning to Edmonton. Available week of 11 May c/o A.S. Knowler. Phones 432-4684, 455-6463.

Two married students wish to housesit from 1 July-20 August (or parts thereof) at location(s) near University. 434-9112 Kathy.

Goods for sale

Antiques; furniture, porcelain, glass, jewellery, silver, collectibles. Appraisals executed for insurance and identification. 12 - 5 p.m. Mary Goulden Antiques, 10437 142 St. 453-2008, res. 452-8549. Drafting table 4'x35", \$175. 467-4902 evenings.

Services

Donnic Typing Services Ltd. Specializing in word processing. 301A 10454 Whyte Avenue. 432-1419.

Kozak Business Services: Complete typing service available. Student discount. #305, 9924 106 Street. 423-3068, 487-1885.

Typing on word processor. Call Darlene 452-1074.

Nu-Tech Word Processing Services Ltd. Reports, theses, dissertations, mailing lists. 403, 10109 106 St. 428-0355.

Singing teacher, Eileen Turner. 439-4661.

Carpentry Service—Renovations, custom work. 434-9709 after 6 p.m. Spanish For Travelling—Mini-groups. Prof. Alonso 434-7870.

Typing—campus steno with 20 years of office experience offers fast and accurate typing service by the AES word processing system. Phone 433-9737.

Expert typing—thesis, etc. 455-0641.

Carpentry Services—Cabinets, decks, basement, small renovations, repairs. References available. 463-0889.

Type at home. IBM. 456-1402.

Tutor needed for 1st year Business student. 1-2 nights a week. \$5/hour. 451-1337.

Cold-sore, fever blisters. Anyone interested in participating in a trial of a new ointments, please contact 432-6280; 432-6231 ASAP after lesion begins.

Piano lessons, \$12/hour. Lynn, B.Mus. 433-6940.



New, extended hours for the Reference Room.

Now, the Reference Room at the Provincial Archives is open until 9:00 p.m. every Wednesday. That's time you can use! You will find government records, private papers, photographs, tapes that document the history and development of Alberta. Come in Wednesday evenings to use the material. Staff is on hand to aid you, but please let us know by 3:00 p.m. what material you need from the stacks so we can make it available.

Monday, Tuesday, Thursday, Friday:

9:00 a.m. to 4:30 p.m.

Wednesday: 9:00 a.m. to 9:00 p.m.

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12845 - 102 Avenue, Edmonton

Telephone 427-1750

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rookie coach *Bruce Twamley*, finished in third place behind Calgary (4-1-3) and UBC (4-1-3). Calgary Dinosaurs were awarded the league pennant, having gone undefeated (one win and one tie) against the Thunderbirds in conference play.

Three Golden Bears were named to the CWUAA All-Star Team: *Kent Fargey* (defender), *Rudy Bartholomew* (forward) and rookie *Scott Fisher* (forward).

Ase Ayobahan led the Bears in conference scoring with four goals, while *Rudy Bartholomew* and *Scott Fisher* had three goals each. The Golden Bears made a southern exhibition trip to Utah and Colorado in the first week of September, finishing the tour with a 3-3-1 record.

Swimming

The Swimming Bears finished sixth in the team standings in a very competitive CIAU national championship in 1981. Although all qualifying swimmers achieved personal bests, athletes from Toronto and Calgary dominated the national meet. *Brian Carleton* captured Alberta's only individual gold, winning the 200 metre breaststroke. *Colla McDonald* was the only Panda swimmer to meet the rigid CIAU qualifying standards, while *Carleton*, *Brent DesBrisay*, *Bruce Lecky*, *Dave Long*, *Dwight Manning* and *Jack Ashton* represented the Bears at the nationals.

The Canada West championship meet hosted by The University of Alberta also proved to be very competitive for the Bears and Pandas. The Golden Bears finished third behind conference champion Calgary and UBC. The Pandas swimmers finished fifth behind Calgary, UBC, Manitoba and Victoria. A strong performance by Panda divers *Cindy Swartzack* and *Allison Godfrey* moved the Pandas into fourth place in the overall women's Swimming and Diving standings.

The highlight for *John Hogg's* swimmers at the Canada West meet was two first places finishes by Gold Bear rookie *Brian Carleton*. Carleton established a new conference record in the 400

Individual Medley and also won the 200 metre breaststroke.

Track and Field

The Track and Field Pandas brought the sixth conference title of 1980-81 to The University of Alberta. The Pandas edged defending champion Saskatchewan 79 to 72 to win the Canada West Championship at the Kinsmen Fieldhouse. The title was Alberta's only women's championship in 1980-81.

Individual women's events winners included *Marianne Frigon* (high jump), *Janet Schula* (long jump), and the 4 x 400 metre relay team (*Lynn Herring*, *Brigit Otto*, *Carol Ostry* and *Shannon Sproule*). All event winners plus *Bev Bush* (1,500m, 3,000m), *Anne Galloway* (1,500m, 3,000m) and *Becky Sjare* (shot put) qualified for the CIAU National Championships.

Meanwhile, the Golden Bears came a close second to the Saskatchewan Huskies in the men's team championship. (The Huskies outscored the Bears 97 to 92.) Individual highlights included two new Canada West records by *Ian Newhouse* (400m, 800m) and a new conference shot put record by *Iraklis Kollias*. The Bears 4 x 800m relay team (*Brent Kassian*, *Blair Rosser*, *Adrian Shorter* and *Ian Newhouse*) also established a new Canada West record in the conference meet in winning an exciting race over Saskatchewan.

Jack Suggett won another event for the Bears, edging out teammate *Sean Kehoe* in the 50 metre sprint. All event winners, plus *Mike Wolfram* (high jump) qualified for the CIAU Nationals in Saskatoon.

Individual conference honors were awarded to *Jack Sugget* ("Outstanding Male" team member) and *Ian Newhouse* ("Outstanding Performer" at the Canada West meet).

Volleyball

Bears

The Volleyball Golden Bears, led by the sparkling play of *Terry Danyluk*, captured their first ever CIAU national championship in

1980-81. The Bears defeated defending champion Manitoba 3-2 in the championship final. *Terry Danyluk* and *Dave Wilson* were named to the national tournament All-Star team, while *Danyluk* was selected the tourney's "Most Valuable Player."

At the outset of the CIAU Tournament in Victoria, *Danyluk* was named to the All-Canadian team and selected as the "Most Valuable Player" in men's university volleyball in Canada in 1980-81. It was the second straight year that the Edmonton native had been recognized as the national "Most Valuable Player."

The Golden Bears, under coach *Brian Watson*, had advanced to the national tournament by winning their first Canada West title since 1975. The Bears downed defending conference champion Saskatchewan 3-1 in the CWUAA final before an enthusiastic home crowd in the Varsity Gymnasium. Other individual honors in 1980-81 went to *Lawrence Sedore*, who was named to the Second Canada West All-Star team.

Pandas

The Volleyball Pandas, under the direction of rookie coach *Heather Hartsell*, finished in fifth place (4-16 record) in the six team Canada West conference in 1980-81. The Saskatchewan Huskiettes repeated as conference and national women's volleyball champions.

The Pandas were a young, inexperienced team this past season. All nine team members

were either rookies or sophomores (five rookies and four sophomores).

The past year was a learning experience for the Volleyball Pandas. Next year should reveal the benefits, and it is hoped, a few more wins that only experience can bring.

Wrestling

John Barry's Wrestling Golden Bears captured their third consecutive Canada West Championship in 1980-81. Despite being plagued with injuries prior to the conference meet, Alberta edged Calgary by two points in the team standings, 37-35. Three Golden Bears won CWUAA titles in their respective weight classes, including *Scott Tate* (54 k), *Shau Holmstrom* (65 k) and *Mark Yurick* (72 k). All three, plus *Dave Langill* (conference runner-up in 51 k class) and *Steve Hibbard* (who replaced an injured conference wrestler in the 57 k class), qualified for the CIAU National Championships at Lakehead University in Thunder Bay.

Tate was Alberta's top wrestler at the nationals, finishing third. *Yurick* and *Holmstrom* were fourth, while *Langill* and *Hibbard* were fifth in their respective weight classes. *Scott Tate* received individual recognition at the 1980-81 conference championships, being named the meet's "Most Outstanding Wrestler." □*

**This article was contributed by Lou O'Hara, Sports Information Director.*

Publication of University History Delayed

The University of Alberta Press regrets to announce that unforeseen delays in the manufacturing of *A History of the University of Alberta: 1908-69*, by former President, Dr. W.H. Johns, has caused the publication date to be set back some six weeks. The book is now expected to be available some time toward the middle of this month.

Those people with copies on order may be assured that they will receive them as soon as stocks

arrive.

Anyone wishing to place an order may now do so. The price is \$25 for a 510-page book with, courtesy of a special grant from the Alma Mater Fund, 64 pages of photographs. Please send your orders to:

The University of Alberta Press,
450 Athabasca Hall,
The University of Alberta,
Edmonton, Alberta
T6G 2E8. □

Research Reporter

Education Study Places the Child in the Forefront

"Maybe we've lost something in education. Maybe we've lost the skill of watching children learn." Those are comments made by Doyal Nelson during discussion of the research which he recently conducted as the first recipient of the Lecture Series Award of the Faculty of Education at The University of Alberta.

Dr. Nelson is a specialist in mathematics education who first joined the staff of the University in 1959. He emphasizes the fact that he has no quarrel with the sophisticated statistical analysis techniques which have come to dominate educational research—the contributions which those techniques have made are great, he says. At the same time, he is worried that the excitement generated by the new techniques has caused educational researchers to lose sight of "the little girl or guy who is learning." Perhaps, he suggests, the skill of really watching children about their learning was lost with the grandmothers of the days prior to the advent of the public school systems.

Dr. Nelson's recent research puts the child who is learning back into the forefront in the area of mathematics education. A summary of his research has been printed under the title "Studying Problem Solving Behavior in Early Childhood." Available from the Faculty of Education, it describes how children between the ages of three and eight reacted when presented with small-scale simulations of real-life problems involving mathematical concepts and asked to find solutions. Altogether, about 350 children were involved; for the main study, ninety were dealt with separately and their problem solving recorded on videotape.

Originally, Dr. Nelson had difficulty finding support for the work. Many considered it too

radical in that he did not propose to set out with a particular hypothesis in mind. Rather he proposed to let the data he obtained shape the study. That methodology was considered suspect by people in many quarters but eventually Dr. Nelson found the support necessary to go forward. And the results, he feels, vindicate the methodology.

The results do not point directly to curriculum changes that should be made in the schools. Rather, they provide a base of strong observations from which future research can be launched. That could eventually translate into curriculum improvements.

Analysis of the videotapes of the children attempting the various problems resulted in a number of observations which Dr. Nelson believes to have importance to mathematics education. A basic one is that children respond well to problems involving manipulation of material. In his research, Dr. Nelson found the children eager to manipulate the elements of a simulation in order to solve the associated problems, even though they were not required to do so and many could have solved some of the problems without resort to moving the elements of the simulation.

Dr. Nelson's problems involved such things as transporting cars on a ferry, finding seats in a theatre, and predicting items in a sequence. The boys, in particular, were very meticulous in going through motions associated with the various simulations; the cars, for instance, were "driven" on to the ferry with horns honking and motors revving. "It sometimes took a long time to get through a problem," says Dr. Nelson.

Another observation that Dr. Nelson considers important is that children are easily distracted by irrelevant attributes in a situation. For instance, in the ferry

problems some children would insist on loading four cars on to the ferry each trip, even though the problem involved determining how many trips would be necessary to transport 15 cars if the ferry took three at a time. "But it will hold four," the children would say in explaining their actions. Others would try to match the colors of the cars. When asked to partition plastic animals into cages, some children were reluctant to place smaller animals in the same cage as a lion. Dr. Nelson refers to these irrelevancies as "noise." "In teaching, it is best to maximize or minimize noise at first?" asks Dr. Nelson, identifying an area that begs further research.

Another finding considered significant was that children, both pre-school and school-age children, were reluctant to make predictions even though it was likely that at least some could have made a correct prediction. Dr. Nelson says that his observations seem to suggest that asking a child to predict an outcome when there is sufficient information upon which to make a prediction seems to stimulate the child to reflect upon the information. Because of that, he suggests that elementary school mathematics programs should provide opportunities for children to practice making informed guesses.

Student's Research May Lead To New Technology

Chris Yakymyshyn does not expect that his research of the past few years will make him rich. But someday he may be able to see the results of that research become a part of everyday life. And that is not a prospect which many first-year university students face so early in their academic careers.

Mr. Yakymyshyn, an engineering student at this University, has an interest in display screens. In fact, he is working on the development of a screen that promises to be superior to the cathode ray tube—familiar to all who watch television—and to the other common display technologies such as liquid crystal and light emitting diodes.

In October, Mr. Yakymyshyn travelled to Cherry Hill, New Jersey, to report on his investigations at the Biennial Display Research Conference, organized in part by the Institute of Electrical and Electronics Engineers. He was the youngest participant.

At Cherry Hill, the University of Alberta student reported on

research that began while he was a student at Louis Saint-Laurent High School in Edmonton. For a Science Fair project, he and fellow student John Markov began experimenting with the design of a display screen using the material known as piezoelectric ceramic. Developed in the 1930s, this material has found many applications in situations where electrical energy must be converted to mechanical energy—for instance in clocks, alarm beepers for digital watches, radar and so on.

While this material has been experimented with in display screens as early as in the 1960s, the Louis Saint-Laurent students took an original approach, combining piezoelectric ceramic with modern display technology. Their Science Fair project placed second nationally in both their Grade 11 and 12 years.

Mr. Yakymyshyn continued the research during the summer following his high school graduation. He has been able to advance the work significantly thanks to two professors, Frank

Weichmann and Bryan Kratochvil, who have lent him the sophisticated equipment he needed.

Mr. Yakymyshyn says that, while the cathode ray tube is a proven and effective display screen, it requires high electrical voltage to operate, and there is considerable heat associated with this. The liquid crystal and light emitting diode technologies require much less electricity but are limited by the fact that they

require an electrical drive line to each spot on the screen where a dot is to be formed—a display is of course, simply the product of many individual dots.

Using piezoelectric ceramic, Mr. Yakymyshyn hopes to develop a technology that will allow liquid crystal displays to operate through the use of only four drive lines. He says that, theoretically, a display screen using this new technique could

have a resolution of 100 dots per inch; ordinary television has only 50 dots per inch.

Even should it live up to its promise, however, Mr. Yakymyshyn does not believe that the new technology will replace the cathode ray tube in television. That technology is simply too well-proven, he says. He visualizes more of a market-sharing situation, with the new technology finding new applications: in visual

displays generated via the telephone system, in new office machines, and in other things of that sort.

Nor does the first-year engineering student expect to become rich from his research. The materials and devices he is using are well-covered by existing patents, he notes. □

Department of Drama Continues to Grow in Stature

Let us now praise a famous department. The University of Alberta's Department of Drama, established in 1948, is acknowledged to be a leading force in drama in Canada. The BFA and MFA degrees in drama were first given in Canada at this University. Perhaps the main reason for its success is that the theatre is a tough taskmaster. Jobs are not exactly abundant and anyone who wants to get a toe in the door has to be dedicated to the profession. That's underlined frequently as the Department goes about the demanding business of imbuing students with knowledge of acting, directing, design, playwriting, speech, movement and other aspects of the art. Visiting the Department is something like being backstage at a play. There is much hustle and bustle and animated conversation and quasi chaos but it's all controlled energy aimed at fulfilling potential.

Surely some of the motivational powers needed to do that have gone out from the Office of the Chairman. Gordon Peacock (Chairman for seventeen years), Tom Peacocke, and James McTeague are "name" people in the profession. They can lead by example. Tom Peacocke, currently Acting (no pun intended) Chairman in Dr. McTeague's absence, won the

coveted Genie Award at the recent Canadian Film Awards. It was no mean feat, especially when you consider that it was Professor Peacocke's initial role in a feature film. His work in "The Hounds of Notre Dame" was cited as being the best performance by an actor.

"I've never worked so hard in my life," he commented of his performance as cantankerous but caring Père Athol Murray, founder and guiding light of Notre Dame College in Wilcox, Saskatchewan. Professor Peacocke found that, unlike plays, films have little regard for rehearsal. In fact, he had to have the Murray character completely defined when he stepped off the plane in Regina. He also had to contend with fragmentation, the foremost example of which was shooting the final scene on the first day of the filming schedule. Then there were seemingly interminable hours spent being made up, tinkering with the script, being called on and off the set, and doing retakes. "I was surprised I came off as well as I did," he said forthrightly.

The Genie will almost certainly generate more business for the film; and Professor Peacocke derived further satisfaction from the way the award evolved. The voting was done by his peers

and he didn't count any sort of "vote for me" campaign.

On another level and, one senses, the one that means the most to Professor Peacocke, the award increased the spirit of togetherness that the Department fosters. At a surprise party thrown by the Department, Professor Peacocke felt that everyone shared in the accomplishment and rightly so.

He is not the only Genie (formerly Etrog) holder in the Department either. Jim DeFelice has one on his mantle for his screenplay of the 1977 film "Why Shoot the Teacher" and actress Carol Lazare, although no longer associated with the Department, has won two Genies.

Bill Meilen was nominated for Best Radio Actor in the national ActRA Awards this year and last year he received nominations for Best Dramatic Writer (ITV's one hour drama "Song for the Eyes of Tovah") and Best Dramatic Writer (the original comedy serial "The Further Adventures of Feldman" which was aired on CBC Radio).

In Professor Meilen's words, "We are proving that the work of this University flows directly into the mainstream of the Canadian theatre, radio, television, and motion picture professions, and our alumni are usually doing top

echelon work all over Canada, some holding top administrative positions and Artistic Directorships."

Among the graduates are Keith Digby, Artistic Director of Theatre 3 in Edmonton; Walter Kaasa of Alberta Culture; Jim Osborne, Script Editor for CBC, Toronto; Mel Tuck, head of the acting program at Ryerson; Martin Fishman, Associate Artistic Director of Theatre Calgary; and Jack Downey, long-time acting agent based in Toronto.

The apple of the Department's eye is Studio Theatre which features the work of the graduating actors, directors, and designers in the BFA and MFA professional training programs. Plays are selected by a committee with the Chairman of the Department serving as Artistic Director. Six plays make up Stage '81 including the first Edmonton production of "Julius Caesar." Once again, the Department collaborated with Northern Light Theatre on a "distinguished professional production," Pinter's "Old Times."

Of course the best way to appreciate the work of the Department is to take in one of its productions. For the current season, that means "Knuckle," a mystery that will run 1 to 6 June in Corbett Hall. □

Attention Home Economics Graduates

For some time now both students and staff at the University have been raising questions about our Faculty color—pink. Because the color appears to offend the image that some Home Economists would like to have of themselves as effective, professional women we have been assisting the students in an inquiry into attitudes about the color.

The only place or activity that the color is now visible is on the BSc hood which each student wears for graduation. A band of pink satin, as you no doubt recall, binds the black hood. Graduation photos, now done in color, show the pink band rather prominently.

As background you may wish to know that the Faculty colors at The University of Alberta do not conform to any universal code. All American universities conform to an American code and the color

for Home Economics in that code is maroon. The Faculty of Dentistry at this University uses the color maroon.

Our current study body has studied colors available and has found a color which the majority of students and the majority of the Faculty Council have agreed on. That color is burgundy.

We felt that it was important to solicit our alumni on a matter which represents a break of a change in tradition. Would you be so good as to detach the form accompanying this letter and return it to me by 1 July 1981. We will let you know the results and the subsequent decision as soon as possible.

*Sincerely,
Doris R. Badir, Dean
Faculty of Home Economics*

Home Economics Faculty Color Survey

Please answer the following:

1. Are you in agreement that the Faculty of Home Economics should change its color?

— Yes — No

2. If you are in agreement, do you feel that burgundy would be a suitable color for the graduation hoods?

— Yes — No

and return by 1 July 1981 to:

*L. Mason,
Administrative Officer,
Faculty of Home Economics,
115 Home Economics Building
The University of Alberta,
Edmonton, Alberta,
T6G 2M8*



Needed: Gowns for Grads

After the decade or so spent arduously studying for a doctoral degree, one might think that a graduand at Spring or Fall Convocation might have no other hurdles set in his path—apart, that is, from payment of library and parking fines. One might suppose also that when Convocation came around, the shining-faced scholar, glowing from his recent encounters with the frontiers of knowledge, might welcome unabashed the opportunity of being admitted in person to the long and honorable roll of University of Alberta graduates, that he would anticipate with a frisson of delight that graceful gesture of admission from the Chancellor. What in Alberta could spoil the satisfaction of that wonderful day of graduation?

A severe shortage of black stuff, that's what. Not oil and not coal (Alberta is short of neither) but cloth, good quality black cloth conforming in design to the Inter-collegiate Code, cloth with Philosophy blue velvet trim, cloth with Education light blue velvet trim. In a word, the Gown.

There is, believe it or not, a lack of doctoral and other gowns for people to wear at Convocation and self-consciously impress their friends and sweethearts.

Stand back a moment and consider the enormity of the problem. If there are not sufficient gowns for all those people who are to be presented to the Chancellor next month, what will they do? Will they stand ashamed, academically naked, before their families, the Chancellor, and the world? Or will they shuffle embarrassed down the aisles of the Jubilee Auditorium to be invested, on stage, in their rightful garb only, after admission, to have that garb snatched from their shoulders without, save for a few brief moments, revelling in the voluminous folds of their mantles of excellence. Think of the shame of it!

Of course, the thought is too much to bear, even to countenance. What action, then, is the Convocation Committee planning to confront the problem? An appeal to you, the alumni, is that Committee's only recourse. Do

you have, gathering dust and feeding moths, an academic costume in your closet? In your attics and basements are there gowns lying, waiting for a day when they might see the light once more, when they might feel pulsing through their warp and weft the pride and glory of another new graduate? Are they lying confined forever to the darkness of a trunk, only to be brought out as an auxiliary blanket when unexpected visitors come to stay?

If you have such gowns, why not allow them respite and grant them their days in the sun? Why not donate them to the University that other graduates might appear

fully and properly dressed before the Chancellor to experience the same flushed and awkward pleasure you experienced at the time of your own graduation?

The problem is grave and the remedy is in your hands. Please do not allow the reputation of your Alma Mater to be so tarnished by the appearance before the Chancellor of improperly fitted out doctors, masters and bachelors. Please, if you can help in any way at all, contact W.A.D. Burns, Office of the Registrar, Administration Building, Edmonton, Alberta T6G 2M7 (432-4537). Time is short. Spring Convocation this year begins on 1 June. □

Community Relations Enters New Medium

"Whatsoever Things Are True" is the English translation of the University's motto—*Quaecumque vera*. It is also the title and theme of an exciting new slide/sound presentation now available to the University community and the public.

Central to the theme of the presentation, the search for truth, is the threefold mandate of the University, teaching, research, and community service. In a captivating twelve minutes packed with colorful slides, "Whatsoever Things Are True" will take you all the way from the origins of the University, almost seventy-five years ago, to the present. Best of all, the program is The University of Alberta—its history, its diverse activities, its attractive physical setting, and the people who make it work. "Whatsoever Things Are True" is a tour for those who are unable to explore the University's thirty-six or more major buildings, and for those who have never seen the control panel of a nuclear reactor. Whether it be a laser beam slicing through a piece of asbestos or a potter throwing clay, the program has something

for everyone.

"Whatsoever Things Are True" was conceived, written, and produced in house by the Office of Community Relations. The project came in response to the marked need for a brief, yet extensive overview of the University as a whole. Slide/sound was chosen for the production, which consists of 158 slides synchronized to a music and voice sound track, because it allows a large amount of diverse information to be presented in a short period of time. This form of medium is easily updated at minimal cost and expenditure of time, offers large, high quality visuals, and is highly portable.

The equipment required to show the program involves two slide projectors, one tape recorder/synchronizing unit, a dissolve unit, and a projection screen. All this equipment is available free of charge on campus, and can be arranged for by most convention facilities on an almost universal basis.

Due to the success of "Whatsoever Things are True," Community Relations has recently extended its services to encompass the audio-visual media. The Office

Psychotherapy Centre Now Open

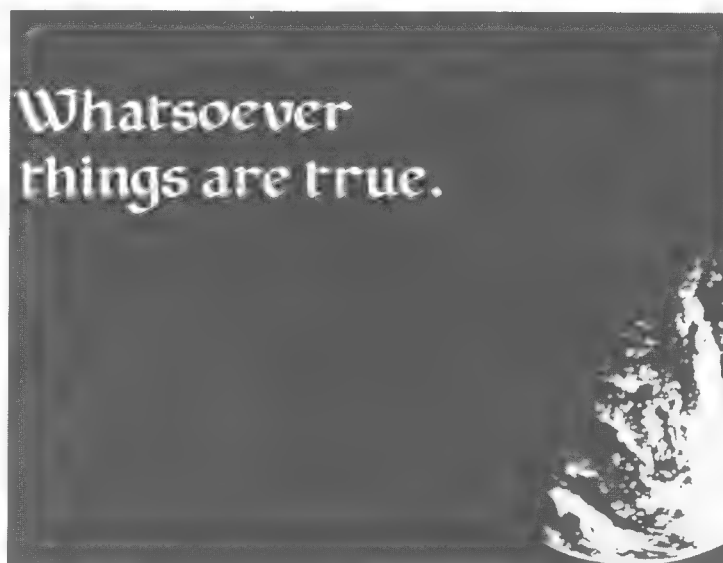
A new research centre has recently begun operation at The University of Alberta. The Centre for Experimental Psychotherapy is a non-profit research company dedicated to the development of new methods for treating behavioral, emotional, and psychological disturbances.

The Centre accepts referrals from a variety of sources: agencies, hospitals, private practitioners, clinics, and so on. In addition, it accepts self-referrals. The "clients" of the Centre are seen on Friday afternoons in its quarters in the Education Centre on the University campus. The clients are seen for a maximum of ten sessions each. While one psychotherapist is dealing with the client, six others watch from behind

one-way mirrors, and the entire session is videotaped. Once the session is ended the psychotherapists compare notes, bringing seven trained minds to the problem, rather than one. While this is not seen as being essentially superior than traditional psychotherapy, more can be done with markedly fewer sessions.

Beyond their use in the therapy, the videotapes are retained for use as research data and training material. This is done, of course, only with the client's approval.

The Centre is designed along the lines of similar research and treatment centres in Palo Alto, California, and Milan, Italy. Its director is Allen Vanderwell; the Associate Director is Sean O'Connell. □



will produce tailor-made slide/sound presentations, on a "first come, first serve basis"—at no cost, for Departments that are unable to produce their own audio-visual material. At this time three such productions have been scheduled.

Production of "Whatsoever Things Are True" involved an extensive search for good photography and the use of several hundred feet of film; the result was a slide library of some 1,500

color photographs representing almost every aspect of the University. This sizeable and ever growing library of color slides adds a new dimension to the Office's already bulging collection of black and white photos. All of these photos are available to the University community at the cost of reproduction.

The Office of Community Relations welcomes any queries concerning these services. Telephone 432-2325. □



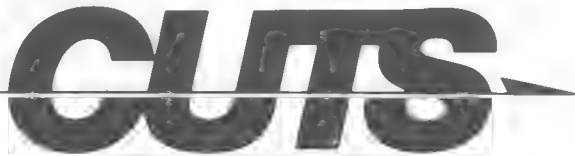
The University of Alberta 75th Anniversary 1982~83

This design created by Timothy Lau of Edmonton has been adopted as the University's official 75th anniversary logo.

Education and Normal School Grads

The University of Alberta Alumni Association plans to honor graduates of the Alberta School of Education and Alberta Normal Schools for the year 1930-31 at this year's Homecoming on Saturday, 3 October 1981. Any information available on the "Golden Year" teachers would be appreciated.

Please telephone the Alumni Office at 432-3224.



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Round Trip from **\$659.00**
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(via Seattle)

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University of Alberta
(403) 432-2592

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Alumni Homecoming 1981

FRIDAY, OCTOBER 2

8:00-10:00 p.m.

Wine & Cheese Party

Meet the Prof's

FACULTY CLUB

SATURDAY, OCTOBER 3

10:00 a.m.

Campus Tour—Rutherford Library (GALLERIA)

11:30 a.m.

Pre-Football Game Luncheon

LISTER HALL

2:00 p.m.

Football Game U. of A. Golden Bears vs
U. of C. Dinosaurs

2:30 p.m.

Homecoming Tea

6:30-7:30 p.m.

Homecoming Reception

LISTER HALL

7:30 p.m.-1:00 a.m.

Homecoming Banquet & Ball

LISTER HALL

SPECIAL CLASSES '21, '31, '41, '56, '61, '71, '76

TICKETS (ALUMNI OFFICE—432-3224)

430 Athabasca Hall, U. of A.

Wine & Cheese Party

\$ 3.00/person

Banquet & Ball

\$12.50/person

Luncheon & Football Game

\$ 3.00/adults

\$ 1.50/children

Combination (all events)

\$18.50/person

alumni notes

25 It is indeed fitting that in 1981, earmarked as the International Year of the Disabled, two distinguished graduates have been recognized with one of Canada's highest honors.

Accepted as Members of the Order of Canada, *Colonel Eric Cormack, BSc(Ag)*, and his wife, *Barbara (Villy), '24 BA*, have been the driving force behind education for the mentally handicapped in Alberta for decades. Sherwood Park's Robin Hood School is but one monument to their dedication. Though the

mentally handicapped have been the focus of their attention for the past few years, other groups, including the Armed Forces and various native organizations have benefitted greatly of their energies.

The Cormacks journeyed to Government House, Ottawa, early in April for the Investiture of the Order, followed by a reception and dinner.

34 *E.K. Woodford, BSc(Ag)*, is scientific advisor, Commonwealth Agricultural Bureaux, Bear Farm, Binfield, Bracknell, England.

35 *William Epstein, LLB*, chairman of the Canadian Pugwash Movement is attempting to "repatriate" the World renowned conference to Canada. The Pugwash Conference was founded in 1955 by Albert Einstein and Bertrand Russell to promote the constructive use of science. The Conference has not been held in Canada since 1958.

37 Former Social Credit hospitals minister, *J. Donovan Ross, MD*, is serving as outside chief of staff, Stony Plain Hospital.

38 Double honors have been placed with *L.O. Bradley, MD*. At a recent annual meeting

the Canadian Hospital Association/American Hospital Association awarded him the George Findlay Stephens Memorial Award for outstanding service in the field of hospital administration. More currently, Northlands Open University conferred an Honorary Doctor of Administration degree on Dr. Bradley for his longtime efforts in the field of extension education.

39 *George R. Stretton, BSc(Ag)*, has retired from his position as District Manager, Food Production and Marketing, Agriculture Canada.

40 *John (Jack) P. Dewis, LLB*, is in the process of retiring from his electoral appointment as Assistant Chief Electoral Officer of Canada.

42 Semi-retired *Roger Flumerfelt, BComm*, is still putting



Col. Eric (BSc '25) and Barbara (BA '24) Cormack.

On Campus Privileges for Alumni

Privilege Cards

Full on-campus swimming privileges for alumni and their families are extended at the University's Physical Education and Recreation Centre. Privilege cards for 1981-82 will go on sale at the Alumni Office, 430 Athabasca Hall, Edmonton T6G 2E8 (Phone: 432-3224). Price: Individual \$67; Family (spouse and children) \$100.

Towels and lockers (for adults only) are available from the equipment room for a small sum. Indoor and outdoor jogging, and weight lifting room (adults only) are free with privilege cards. Building hours for the Physical Education and Recreation Centre are: (Monday to Friday) 7:30 a.m. to 10 p.m. (Saturday) 8 a.m. to 5 p.m., (Sunday) 10 a.m. to 5 p.m. (Statutory holidays closed). From 1 May to 7 September 1981, the Centre will close at 9:30 p.m. during the week. (Saturdays, Sundays, and Statutory holidays closed).

Library

Alumni enjoy certain privileges. They may enter and use library materials. Borrowing privileges are permitted to members of the Alumni Association with demonstrable research needs. Arrangements for borrowing privileges should be discussed with the head librarian's secretary (432-3790), fifth floor, Cameron Library.

in six hours a day in Vancouver as a life underwriter specializing in estate planning, corporate benefits and charitable trusts. His "avocations" are equally engaging. One of the most recent, chairing a three day think-tank for the Canada Jaycees. The subject "Tomorrow's Opportunities for Canadians" with support from Kiwanis Clubs of the Pacific Northwest District, Vancouver School Board, Vancouver Board of Trade, plus a reunion of past national officers of Canada Jaycees.

Audrey (Ladler) Ames, BA, has retired as Head of Information Services, Defence Research Establishment, Suffield, after twenty-three years with the Department of National Defence.

43 Chancellor of the University of Calgary and a director of several Canadian corporations, *Jean-Louis Lebel, LLB*, has been elected to the board of directors, Credit Foncier.

45 *George W. Govier, MSc*, has joined the board of directors, Stone and Webster Canada Limited.

It was announced recently by *Hu Harries, BSc(Ag)*, the National Party of Canada will hold a founding convention this Spring and a leadership convention in the Fall. The party represents the interests of disaffected Westerners while standing strong in favor of a united Confederation.

46 *Elio D'Appolonia, MSc(Eng)*, is the 1981 recipient of the Engineers' Society of Western Pennsylvania William H. Metcalf Award for outstanding engineering achievement. Dr. D'Appolonia, registered as a professional engineer in nine states, and a member of twenty-four professional societies, founded D'Appolonia Consulting Engineers, Inc., in 1956.

Louis Castelli, BSc(Eng), has retired from Mobil Oil after more than thirty years' service, but remains as a consultant. Lou and Rosemarie, '55 BSc, will continue to reside in Dallas, Texas.

48 *Barbara Bromley, BSc(Nu)*, has been appointed to the University Senate. She has been very active in community affairs in Yellowknife, NWT.

49 Amoco Canada has announced the appointment of *Frank B. Matthews, BSc(Eng)*, as superintendent, supply operations.

50 *Paul Chaba, BSc*, late of Litton Industries, San Carlos, California, has retired and returned to Canada.

It is the opinion of *Wayne Minion, BSc(Eng)*, chairman, Alberta Petroleum Marketing Commission, that refineries had stock-piled enough oil in anticipation of Alberta's planned production cuts that Canada would not have to look for new supplies until September.

55 *J.B. Lowery, BSc(Eng)*, has joined Home Oil Company as general manager (Law).

56 *Ian C. MacDonald, MEd*, has retired as publisher, Medicine Hat News.

W. Grant Fairley, BComm, New York Life Insurance, Edmonton, is president of the 19,000 member Life Underwriters Association of Canada.

58 *Denis C. Fonteyne, BSc*, is manager, natural gas, Sulpetro Limited.

E. Jorgensen, BComm, is corporate treasurer, Home Oil Company.

Former Court of Queen's Bench Justice *John Wesley McClung, LLB*, was sworn in recently as a justice of the Alberta Court of Appeal.

If it weren't for *David Markle, BSc(Eng)*, Santa might not have delivered that electronic football game under the tree last year. An invention for which Markle and two of his co-workers share the 1980 "Man of the Year" award from a leading US science magazine, *Electronics*, has lead to the less costly manufacture of digital watches, color televisions, computers and space-age electronic games which have boomed in popularity in recent years. Called a projection mask aligner, the machine is a production tool used in the development of micro-circuits—a key element used in producing electronic equipment at a low cost. A highly technical



optical instrument about the size of a piano, the mask aligner is used to copy fine patterns onto wafer-thin slices of silicone which ultimately become microcircuits.

The invention was welcomed by the commercial market and is now widely used around the world. (Editor's note: Yes, he is related. The son of the Editor's first cousin, *Charles S. Markle*.)

59 *Beth (Bidulock) Chappell, BSc(Nu)*, University of Hawaii epidemiologist, co-authored "Cancer Mortality in a Cohort of Naval Shipyard Workers in Hawaii: Early Findings." The work is supported by the US Office of Naval Research and is of interest because of Hawaii's demographic and environmental uniqueness.

Arthur A. (Scotty) Day, BEd, with field services, Alberta Education, since 1966 has been seconded to curriculum education.

Alberta treasurer *Louis Hyndman, LLB*, has indicated that the Alberta Heritage Savings Trust Fund is spending about \$200,000 on a print advertising campaign to promote the Fund's new logo. The logo, designed to give a greater visibility to the Fund's activity, will appear on railway cars and projects financed from the \$7.4 billion fund.

61 *Darryl Auten, BD*, is busy beyond what many consider the realm of sanity and could not be happier. The president of Lendrum Place Community League, Rev. Auten, full-time director of programming

Let's Expand with the Eighties

Your University invites you to consider forming an Alumni Branch in your area. Establishing a Branch is not difficult; one needs a minimum of ten members, a written constitution for such Branch and the approval of such constitution by the Alumni Council. The prime aim is to promote the welfare of the University. If there is sufficient interest the principal officers of the Association will be happy and willing to meet and discuss this matter with the group.

If you are in an area where it is not feasible to take such action, the Alumni Council may appoint "key members" (registrars) to promote the aims of the Association. Five or more members of the association may form a local committee. All members of Convocation are automatically members of the Alumni Association for life, without fee. The Alumni Council hopes you'll participate in this important endeavor and is willing to give full support. Please direct any enquiries to the Alumni Office, 430 Athabasca Hall, University of Alberta. T6G 2E8 Phone: 432-3224

and research, St. Stephen's Theological College, executive member of the Edmonton Social Planning Council, is finishing a PhD thesis.

62 Cary Nathan Davids, MSc, is researching nuclear physics at Argonne National Laboratory. A note written on the back of an Alma Mater Fund donation card indicates that he plays the trumpet on weekends for various dance bands around the Chicago area.

Peter Hyndman, BComm, is Minister of Consumer Affairs, British Columbia. Mr. Hyndman, a lawyer, is a brother of Alberta Provincial Treasurer, Louis Hyndman.

David G. McLean, LLB, was recently appointed to the Board of Governors, University of British Columbia.

63 Matt Shykora, BEd, supervisor, industrial education, Edmonton Catholic School Board, has been seconded to Alberta Education for a two-year period.

64 Robert Prather, BEd, formerly assistant superintendent, St. Albert, has been appointed public school superintendent, Fort McMurray.

67 John Richard Craig, BSc(Eng), is project manager, Dome Petroleum, Calgary.

After winning a nation-wide intelligence test, Bernard Galbraith, BEd, might justifiably consider himself one of Canada's brightest citizens. But the Edmonton Public School Board science supervisor says nonchalantly, "I was fortunate to win a contest." However there was more than luck involved since 15,000 people entered the tests, sponsored by Mensa. For his efforts he has won a trip for two to Greece.

68 A.S. (Al) Nawata, BSc(Eng), is manager of operations, Alberta and Southern Gas Co.

Stella M. Thompson, MA, has been appointed manager, New Ventures Evaluations, Downstream Development Division, Petro-Canada.

70 Tim Sherstan, BEd, is Edmonton branch manager, Equitable Life.

An Edmonton lawyer specializing in family law, feminist Helyna Freeland's, LLB, view of the world cannot be found in an ordinary book store. Several years ago she joined two friends to open "The Common Woman" book store as an alternative source of reading material for women with a feminist outlook. It is now run by a collective of ten women, who are holding down full-time jobs as well. The store stocks 15,000 volumes on subjects ranging from violent crime against women to how to get ahead in male-dominated businesses and political theory.

71 W.R. Duncan, BSc(Eng), is engineering manager, Ocelot Industries.

Subhash Swarup Aggarwal, MSc, is manager, aromatics department, Polysar Ltd., Sarnia, Ontario.

72 M.H. (Mike) Ross, BComm, is vice-president, Business Development, J.D. Bond Construction Group Ltd.

Helene McLeod, MEd, is director, special educational services, Alberta Education. Dr. McLeod is responsible for developing, acquiring, distributing and evaluating counselling services and programs of study for students with special needs.

73 J.P.N. Badham, PhD, is lecturer, economic geology, University of Southampton.

74 Jacqueline Preuss, BA, winner of a 1981 Johann Strauss Foundation scholarship will spend the summer in Salzburg.

Alan D. Murray, BEd, is editorial assistant of a bi-weekly newspaper, Salmon Arm.

Rebecca Murray, BA, is completing a MA thesis in anthropology, University of Victoria, and plans to work on an archaeological project in the Arctic or Greece this summer.

Lorne Clark, BSc(Ag), is southwest Edmonton manager, Cowley & Keith Ltd., real estate.

75 Connie Kaldor, BA, is well into her career as a singer. Her first record album was produced in 1980. The first pressing of 2,000 has sold well enough that another has been ordered.

Mike Stadnyk, BSc, is district manager, Grande Prairie Open Hole, Schlumberger of Canada.

76 James Edward Browne, BA, is attending the Canadian Theological College, Regina.

77 Ken Lalonge, BComm, is a chartered accountant in public practice, Kamloops, B.C.

Bonnie D. Clark, BA, is juvenile probation officer, Yukon Territorial Government.

Maureen Matthew, BSc(HEC), is training coordinator, Saskatchewan Museum Association.

79 Editor of the *Western Catholic Report*, John Rasmussen, has resigned from the diocesan newspaper.

80 David Payne, MBA, has joined Price Waterhouse Associates, Edmonton, as senior

consultant, human resources group.

John Kerr, MSc, is manager, Saskatchewan operations, Hardy Associates Ltd.

In Memoriam

J. Russell Love, '20 BA
William Orris Turner, '24 BA
Elizabeth Brunton, '26 MD
G.F. Bullock, '27 BSc(Pharm)
Alice E. (Sherry) Brewer, '27 BSc(HEC)
Alfred Leahey, '27 MSc
William James Downs, '30 BA
T. Hawker, '32 DDS
Robert Kennedy (Casey) Colter, '36 MA
Annabel Jean (Smith) McNichol, '38 BSc(Nu)
Catherine Elizabeth Ford, '46 BEd
John Winfred Shortreed, '48 LLB
Misette Lahey, '52 BSc(HEC)
Park Davidson, '59 MA
Colin Campbell McLaurin, '61 LLD
Barbara McLaren, '68 LLD
Ethel Mary Lyons, '69 BEd
Sidney M. Blair, '75 LLD
Elizabeth Smith, '75 BEd

Proposed Branch in Calgary

Are you interested in forming a Calgary Branch of The University of Alberta Alumni Association?

This proposal has been discussed with the Alumni Council and if there is sufficient interest, a Calgary Branch will be organized as part of our 75th Anniversary Year (1982-83) Celebrations.

For further information, join us at:

BRUNCH

Sunday, 31 May

11:30 a.m.

GLENCOE CLUB, CALGARY

\$6.50

GUEST SPEAKER: ALEX MARKLE, ALUMNI DIRECTOR

Please forward cheque to:

Mrs. Joanne Watson,

R.R. #6,

Blackhillock Farm, Garden Road,
Calgary, Alberta. T2M 4L5

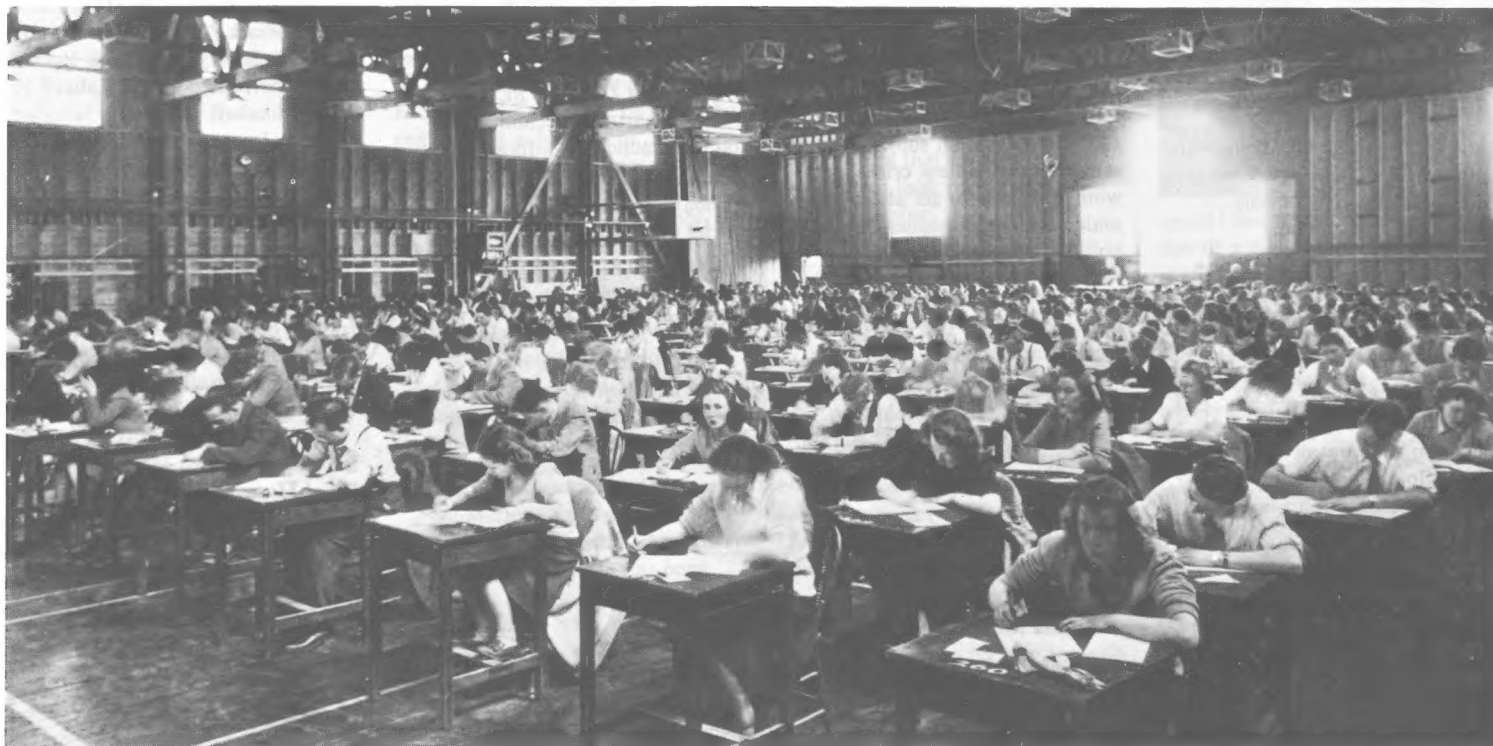
Deadline: 28 May 1981

Jean E. Mucha,
Vice-President,
General Alumni Association

75th Anniversary

The University of Alberta will celebrate the 75th anniversary of its academic offerings in 1982-83. Alumni, staff, and students are invited to participate in the planning of the Jubilee celebrations by submitting ideas for special projects and events.

*Please send your ideas to:
Dr. W.A. Preshing, Chairman
75th Anniversary Policy Group
420 Athabasca Hall
The University of Alberta.
T6G 2E8*



Examinations. (Courtesy UA Archives)

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